ETHICAL LEADERSHIP IN THE EMPLOYMENT RELATIONSHIP: EVIDENCE FROM THREE CANADIAN SURVEYS

by

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The purpose of this program of research was to investigate ethical leadership as an antecedent, mediator, and outcome of variables of pragmatic importance to the workplace. Three interrelated studies examined the ethical imperative of the employment relationship using three independent datasets. Ethical leadership, as explained by social cognitive theory, was the central concept modeled in each study. Sample sizes of approximately 1,500 military members of the Canadian military were randomly selected for each study to participate in single-source, cross-sectional surveys conducted in a field setting. Correlation and Multiple Regression analyses were used to test relationships at the individual level of analysis. Key results and measures were replicated utilizing confirmatory factor analytic techniques. These studies contribute to ethical leadership research in three ways. First, findings indicated that a follower’s rank was positively associated with perceptions of ethical leadership of the immediate supervisor. Second, perceptions of ethical leadership were moderated by the type and level of follower ethical predispositions in boundary-spanning positions. Third, ethical leadership functioned as a partial mediator transmitting the effect of follower rank onto the workplace outcomes of
follower affective commitment, organizational fairness climate, and career satisfaction. Implications for theory and practice are discussed. As a whole results suggest that organizations can effectively address the ethical imperative of the employment relationship through the clear lens of the individual being led – the ubiquitous follower.

Disclaimer

“The opinions and conclusions presented in this document are those of the author and do not necessarily reflect those of the Department of National Defence/Canadian Forces”.
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Chapter One: Introduction

“The most important human endeavour is the striving for morality in our actions... Only morality in our actions can give beauty and dignity to life” (Einstein, 1950, p. 393).

The study of leadership has been one of mankind’s most ardent pursuits. While there are many delineations of leadership in the organizational sciences, leadership in the most basic sense involves the process of influence (Yukl, 2010). In the management context, the term leadership itself often conjures images of influential organizational figures directing subordinate human resources in the execution of a particular task or mission. One environment where this is particularly evident is in a military organization. The military has long recognized leadership to be both an art and a science – the science being rooted in psychology. Many facets of a military organization such as its hierarchical rank structure, its systematic approach towards training and development that functions as a correlate for rank, the astute application of operational protocols such as rules of engagement, and its pivotal role in the provision of national security are rooted in leadership. Leadership represents one of the defining characteristics of what a military organization stands for and is expected to espouse. Effective leadership in the Canadian Forces (CF) has been entrenched in CF leadership doctrine through the institutionalization of honesty, integrity, loyalty and obedience while facilitating mission success through the supervision of others in a manner that is both developmental and ethical (Hillier, 2005). Ethics, as defined by this organization, is about dealing with what is right and what is wrong (Jeffery, 2002). Thus, ethics is central to leadership precisely because it involves the process of influencing others to accomplish goals in ways that ultimately shape the values, climate and culture of an organization (Northouse, 2001).
The pervasiveness and centrality of ethics in leadership is not confined to military organizations alone. For the past half-century, scholars have realized that the focal elements of effective leadership are comprised of both efficacy and morality/ethics together (Dickson et al., 2001). Recently, Uhl-Bien (2007) chronicled the major ethical scandals of the past decade in some of the largest and most successful North American firms. Some noteworthy examples are Enron, WorldCom, and Tyco International all of which highlighted how deficiencies in ethical leadership resulted in devastating consequences for both employees and shareholders alike. More proximal to the time of this writing, the global financial and economic crisis of 2007 – 2009 can also arguably be attributed to ethical misgivings by persons of influence. A recent study involving 300 senior business, public sector and not-for-profit leaders from Canada, the United States (US), the United Kingdom, and Hong Kong conducted by the Richard Ivey Business School in 2010, concluded that better leadership in terms of competence, character, and commitment - all facets of what will be defined below as “ethical leadership”, could have prevented the global economic and financial crisis (Gandz et al., 2010). In the military context, the removal from command of Canadian Brigadier-General Daniel Menard, Commander of Task Force Afghanistan for violating the CF’s rules on personal relationships, and the forced resignation of US General Stanley McChrystal, Commander of US forces in Afghanistan for disloyal comments directed towards the President of the US, all point to the employment relationship, and ultimately ethical leadership.

In the past decade, both the business world’s response, as witnessed through the actions of Fortune 500 companies, and the military’s response to this growing crisis was to increasingly adopt codes of ethics and appoint ethics officers as “moral watch-dogs”.

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However, history has shown us repeatedly that such perfunctory treatment of complex problems involving morality and decision-making are often inadequate. One reason is that leaders themselves have the capacity to influence the ethical behaviour of their subordinates more than codified ethical regulations or imposed standards (Kronzon, 1999). Thus, in addition to the growing concern that society no longer tolerates organizational leaders who are indifferent to their moral obligations, it is argued that ethical leadership is indeed a fundamentally critical role of the leader (Mendonca & Kanungo, 2007).

While there has been considerable scholarship on the topic of leadership in general, traditional leadership theory has not, until recently attempted to empirically incorporate the ethical dimension of leadership as a separate construct. Instead, the issue of ethics has been subsumed by other leadership theories, namely, the idealized influence dimension of transformational leadership. Today, there is an emerging literature that addresses the ethical dimension of leadership as a separate functioning construct – a construct that embeds both transformational and transactional leadership elements and, over the course of its validation, has accounted for the effects of other overlapping constructs such as transformational leadership, charismatic leadership, leader honesty, and fair treatment (Brown et al., 2005).

**Ethical Leadership**

Ethical leadership, as defined by Brown et al. (2005) – the first researchers to empirically validate this construct is:

“The demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making” (p. 120).
The theoretical mechanism that explains ethical leadership is social cognitive theory (Bandura, 1977; 1986) and consistent with Brown et al. (2005) this new construct is measured by assessing followers’ perceptions of their leader.

Social Cognitive Theory

The Brown et al. construct of ethical leadership is grounded in Bandura’s (1977; 1986) social cognitive theory. This theory is used to explain why both situational factors such as the workplace environment, and individual characteristics of a leader influence followers’ perceptions of their leader as an “ethical leader” (Brown & Treviño, 2006). Social cognitive theory posits that in order for learning to take place by a follower, a credible leader for whom there is an affinity by the follower (called attractiveness) must model target behaviours that are normatively appropriate. Target behaviours that the leader is expected to model are incorporated in the Brown et al. (2005) measure (see Appendix). Key themes emanating from these target behaviours include: leading by example, providing followers with voice, exercising consideration, and engaging in decision-making that is fair and balanced.

Learning takes place in the above context as followers zero-in on what they observe, internalize the values and norms displayed by the leader, and eventually imitate the behaviours of the leader when faced with similar situations. Bandura (1977) refers to this process as vicarious expectancy learning and social cognitive theory asserts that one of the most effective ways to influence human behaviour is by observing the actions of others – especially of those who are considered to be of higher standing; such predictive cues can be witnessed in everyday life. For example, pedestrians stopped at a crosswalk are more likely to cross through a red light if they witness an executive dressed in business attire begin to
cross than the same person dressed in slovenly attire (Bandura, 1977). This type of modeling in the context of a military organization is commonly referred to as leading by example and vicarious learning is made possible because most individuals look to others – especially leaders for ethical guidance (Treviño, 1986).

To further elucidate the notion of a leader’s affinity, “attractiveness” as a leader, according to Brown and Treviño (2006), is facilitated by both power and status. A leader’s power can be viewed as a function of one’s position or occupational level in the organization – sometimes referred to as legitimate power, which recognizes the authority that the leader is empowered to exert over the follower. Sherif et al. (1955), in a series of laboratory experiments, demonstrated that judgements of a leader’s competence were assessed higher by followers, the higher the leader’s position in the organization – thereby highlighting the possibility one’s rank in an organization alone is considered “attractive” by followers thereby contributing to a leader’s affinity resulting in more favourable perceptions of that leader. Bandura (1977) asserted that individuals who occupy positions of high status or power are more effective in prompting others to behave in a desired manner compared to those who are lower in the status hierarchy. This is because, when followers are unsure about the wisdom of a modeled course of action, they look for cues or symbols that can serve as a proxy for status, and as in the example of pedestrians crossing on a red, will imitate that behaviour if they are “attracted” by that status. Thus status enhances what Bandura refers to as the cuing or priming function of modeled conduct. Status was also found to be an important ingredient of leadership success in organizations (Bass, 1990).

In the context of ethical leadership, the notion of attractiveness can be viewed as a function of a leader’s status. It also involves the added dimensions of care, concern and fair
treatment of followers. Parallel to the notion of attractiveness, a final important dimension of ethical leadership is the leader’s trustworthiness. Trustworthiness also enhances a leader’s credibility in the role-modeling process (Brown & Treviño, 2006).

A further mechanism underpinning ethical leadership, consistent with social cognitive theory, is that in order for appropriate normative conduct to be learned by followers through role-modeling, not only do ethical leaders need to be perceived as attractive and credible, while “practicing what they preach” (including in their personal lives), but they must also reinforce desired behaviours through two-way communication, reward and punishment. The former mechanism is critical for the reinforcement of desired behaviours within the follower and is consistent with social cognitive theory. Finally, ethical leaders communicate the normative appropriateness of desired behaviours by making the ethics message salient in their sphere of influence. This communication is both direct, in the case of explicit dialogue over ethical content within the workplace, and indirect in that ethical leaders display normatively appropriate conduct in their private lives.

**Review of the Literature**

Brown et al. (2005) empirically distinguished the construct of ethical leadership from other related constructs such as transformational and charismatic leadership. Through seven interrelated studies, they validated the psychometric properties of this construct, established the nomological network with other variables, provided a definition of ethical leadership, and showed how social cognitive theory explains the psychological mechanism through which ethical leadership is perceived by followers. In doing so, Brown et al. laid the conceptual and empirical framework for ethical leadership and demonstrated its usefulness for predicting
important workplace outcomes such as the perceived effectiveness of leaders, followers’ satisfaction with their supervisor, dedication, and followers’ willingness to report problems to management. Two key areas for future research were identified. The first area involved studying ethical leadership from multiple levels of management and identifying whether ratings of close versus distant leaders’ ethical leadership coincide. While some researchers have begun to address this concern (Treviño et al., 2008; Mayer et al., 2009), a knowledge gap persists regarding how ethical leadership is perceived at lower ranks in the hierarchy. A second area of study is circumstances influencing the perceived importance of ethical leadership. Brown et al. (2005) suggested that the importance of ethical leadership might partially depend on the job context. They specifically referred to Thompson’s (1967) concept of “boundary-spanning”. This dissertation addresses these two gaps in the literature, and extends the boundary-spanning concept in a unique workplace environment.

Brown and Treviño (2006) reviewed the “state of the art” in ethical leadership and offered propositions to stimulate further research. These propositions included a call to investigate: (a) individual differences such as agreeableness, conscientiousness, and neuroticism as antecedents of ethical leadership; (b) the relationship between ethical leadership and prosocial behaviour; (c) the relationship between follower satisfaction, motivation, and organizational commitment; and, (d) contexts that support ethical conduct (Treviño, Weaver, & Reynolds, 2006). Brown and Treviño also reiterated their call for more work to understand how ethical leadership might be perceived differently depending on the hierarchical level of the leader. In response to this call, the present research addresses the extent to which an organization’s climate is related to ethical leadership, and the extent to which ethical leadership is related to follower satisfaction.
The influence of demographic variables in morally charged research is a persistent area of concern in the extant literature. The question of whether demographics influence ethical behaviour dates back two decades. Gilligan (1982) argued that universal theories of moral development such as Kohlberg’s (1969) cognitive moral development theory are based exclusively on the male experience, and therefore contain a gender bias. Rest’s (1986) Four-Component Model (Moral Sensitivity, Moral Judgement, Moral Motivation, and Moral Character) highlights flaws in Gilligan’s methodology. Rest provided evidence to suggest that gender differences are trivial in this domain. Brown and Treviño (2009), however, found that the race and gender reflect differences in employee values. They argued that the characteristics that employees bring to the employment relationship might impede a leader’s ability to shape the values of followers. In short, the question of demographics in morally charged research is mixed, and therefore is examined in the present study.

Intersecting the fields of organizational psychology with moral philosophy, Treviño, Weaver and Reynolds (2006) asserted, based on social cognitive theory that issues high in moral intensity are more salient and therefore are more likely to be realized as ethical issues by respondents. Reynolds (2006) tested this proposition with Brady and Wheeler’s (1996) conceptualization of utilitarianism and formalism as explained by Brady’s (1985) Janus-headed model of ethical theory. Reynolds (2006) demonstrated that although both utilitarians and formalists could identify issues with ethical content that could cause harm (moral awareness), only formalists recognized both harm and the violation of a norm. This suggests that formalists, consistent with the hierarchical stages of Kohlberg’s (1969) cognitive moral development theory, are representative of an advanced ethical decision-making framework. Further, Schminke and Wells (1999) found that initiating structure and
consideration (Stogdill, 1963) played a more important role in shaping formalism than utilitarianism. Formalism was found to be more internally focussed than utilitarianism, and hence less susceptible to external environmental influences. In the context of ethical leadership, this finding suggests that formalism is more responsive than utilitarianism to the modeling influence of the direct leader, because ethical leadership by definition involves the exercise of consideration. For example, ethical leaders “listen to what employees have to say” and, “have the best interests of the employee in mind” (Brown et al., 2005, p. 125). Thus, an additional gap in the literature is evident regarding the relationship between ethical predispositions and ethical leadership. This gap is addressed and further elucidated in the present study by considering these variables in different workplace contexts.

To begin to address Brown and Treviño’s (2006) proposition concerning the effect of ethical leadership at different levels in the organizational hierarchy, Mayer et al. (2009) found that both top management and supervisory ethical leadership assessed from the perspective of followers, were positively related to a group’s organizational citizenship behaviour (OCB) and negatively related to group-level deviance. This suggests important consequences of ethical leadership originating from the pinnacle of an organizational hierarchy. Utilizing social cognitive theory and social exchange theory to formulate their hypotheses, Mayer et al. found support for a model of ethical leadership that states that ethical leadership flows or “trickles down” from one organizational level to the next, and that supervisory ethical leadership mediates the effect of top management on both OCB and group-level deviance. The present study builds on the cascading effect of leadership from a different vantage point, namely, the follower. Specifically, this study addresses a gap in the
literature concerning the relationship between follower rank and perceptions of the immediate supervisor’s ethical leadership.

To address the influence of personal characteristics, Walumbwa and Schaubroeck (2009) investigated the antecedents and consequences of ethical leadership. They found that leader self-ratings of agreeableness and conscientiousness were positively related to follower assessments of ethical leadership. Leader neuroticism was unrelated. These findings suggest that at least two personality factors are antecedents to followers’ perceptions of ethical leadership. Walumbwa and Schaubroeck also found that ethical leadership was related to followers’ “voice” behaviour (an outcome) and that this relationship was partially mediated by psychological safety. Additional gaps in this literature domain are related to “desirable workplace outcomes”, namely, the relationship between ethical leadership and the organizational climate, and ethical leadership and followers’ career satisfaction. Career satisfaction is a particularly useful area of inquiry because it relates to a follower’s vocational development, which is a key ingredient in the realization and implementation of his/her self-concept (Super, 1953). The modeling (transformational) and facilitative (transactional) aspects ethical leadership are likely critical to this process.

Piccolo et al. (2010), utilizing the Hackman and Oldham Job Characteristics Model (JCM), investigated the relationship between ethical leadership and the JCM components of task significance, job autonomy, effort and performance. Ethical leaders, who modeled normatively appropriate behaviour, had a positive impact on followers through the JCM components of task significance and autonomy (ethical leadership was positively related to both task significance and task autonomy). Task significance and effort fully mediated the effect of ethical leadership on subordinates’ job performance. It may be that rank/status is an
antecedent, ethical leadership is a mediating mechanism and organizational commitment is an outcome. These three variables may elucidate a system through which one’s loyalty and involvement in an organization are achieved beyond the extrinsic benefits of one’s rank/status alone. The latter notion was tested in this study.

In the application of cross-cultural research, De Hoogh and Den Hartog (2008) examined ethical and despotic leadership in the Netherlands. Ethical leadership was defined in terms of morality, fairness, role-clarification, and power sharing. This is different from Brown et al.’s (2005) conceptualization. They found that leaders high on social responsibility were rated higher on ethical leadership and lower on despotic leadership by their followers. Ethical leadership was positively related to top management team effectiveness and subordinates’ optimism regarding the future of their organization. Similarly, Khunita and Suar (2004), also utilizing their own measure of ethical leadership, demonstrated in a management survey in both the private and public sector in India, that ethical leadership is positively related to job performance, job involvement, and affective commitment. Finally, Resick et al. (2006) utilized measures and data from the Global Leadership and Organizational Effectiveness project. They concluded that ethical leadership, characterized by integrity, altruism, collective motivation, and encouragement is universally supported across cultures. Resick et al.’s finding suggests that ethical leadership is a universal construct in that it established that the constitutive elements of what can be considered “normatively appropriate” transcends culture and ethnicity. However, a test of Resick et al.’s assertion, relating ethical leadership to the multicultural ideological view points of followers, would further strengthen the notion that ethical leadership is a universal construct. This test was conducted in the present study.
Research Questions

The goal of this program of research is to use theory and empirical evidence to expand what is currently known in the organizational sciences about the causes, consequences, and unique role of ethical leadership in the workplace. Budd (2004) theorized that the employment relationship could be viewed as a triangulation and balance of efficiency, equity, and voice. Budd’s framework suggests that the ethical imperative of the employment relationship can be realized through the practise of ethical leadership. However, because the employment relationship is often inherently imbalanced with efficiency and equity concerns tipped in favour of leaders, rank or status of the follower becomes an important lens through which this relationship is witnessed and understood. In particular, the organizational climate, the follower’s satisfaction with her/his career, her/his level of commitment to the organization, and the degree to which s/he espouses organizational values all stem from ethical leadership as perceived by the follower. Thus, the first aim of the present research is to establish the role of follower rank or status in shaping perceptions about their leader’s ethical leadership. Next, because followers are employed in different workplace contexts and differ in their own ethical predispositions, a second aim is to determine the extent to which follower ethical predispositions influence their perceptions of ethical leadership in different contextual circumstances (e.g., when followers are required to work outside the technical core of the organization). The third objective is to determine whether ethical leadership is able to function as a mediating mechanism. Specifically, this study addressed four research questions:

1. Does follower rank/status in an organization influence their perceptions of their leaders’ ethical leadership?
2. Do ethical predispositions of the follower alter perceptions of their leaders’ ethical leadership in different workplace contexts?

3. Is ethical leadership related to desirable workplace outcomes such as organizational fairness climate, follower career satisfaction, followers’ positive view of multicultural ideology, and follower affective commitment?

4. Does ethical leadership contribute to desirable workplace outcomes through the transmission of indirect effects? In other words, to what extent does ethical leadership function as a means for the follower’s rank to exert its influence on outcomes that are considered?

**Overview of Theory**

Multiple scholars have commented that the ethics of the employment relationship is an understudied, yet important area (Budd, 2004; Brown et al., 2005; Mendonca & Kanungo, 2007; Walumbwa & Schaubroeck, 2009; Mayer et al., 2009; Piccolo et al., 2010). This dissertation addresses what Budd (2004) referred to as the ethical imperative of the employment relationship.

The theoretical basis for this research is multifaceted. Social cognitive theory (Bandura, 1977; 1986), explains the mechanisms underpinning ethical leadership, as well as the influence of rank/status in further advancing these mechanisms. Rank/status is also explained in terms of occupational segregation with social identity theory (Ashford & Mael, 1989) and with leadership categorization theory (Lord et al., 1984). The latter is particularly useful for explaining leadership processes from the perspective of the follower. To further underscore how rank was conceptualized in the present context, the contributions of experimentalists were also explored (Sherif, 1955; Borgatta, 1955; Levine & Butler, 1952).
Human capital theory (Becker, 1964) served to underpin the notion of rank and training as correlates because the latter are integral to the organization studied.

Next, the notion that all ethical theory can be distilled into two broad categories involving outcomes (utilitarianism), and actions (formalism), is used to elucidate the role that ethical predispositions play in shaping followers’ perceptions of ethical leadership. Brady’s (1985) Janus-headed model of ethical theory as well as the work of Brady and Wheeler (1996) is used to underpin hypotheses involving ethical predispositions. The examination of ethical leadership and ethical predispositions in different workplace contexts is informed by Thompson’s (1967) administrative theory involving boundary-spanning.

Lastly, outcomes of ethical leadership are explained in terms of organizational fairness climate (Victor & Cullen, 1988; Kelloway et al., 1999), follower career satisfaction utilizing value-percept theory (Locke, 1976; Warr et al., 1979; Ostroff, 1992; Judge et al., 2001) and organizational commitment (Meyer & Allen, 1997). Each of these theories will be further delineated in the chapters that follow.

**Overview of Studies**

This program of research utilizes three independent datasets from the Canadian Department of National Defence (DND). These datasets were obtained through a memorandum of understanding between the researcher and DND. The secondary source data is from the 2004, 2005, and 2007 CF Your-Say surveys. The Your-Say survey is a continuous attitude survey developed by DND in 2003.

The participants were drawn from a large Canadian public sector organization – the CF (full-time personnel only). The final sample frame in each survey consisted of approximately 51,000 personnel. The final target sample size desired by DND for each
survey was 3,000. Two characteristics were utilized to select the sample: the L1-organization (similar to a regional variable) and rank (there are four over-arching rank groupings in the CF).\(^1\) Stratified random sampling is likely used by DND for reasons of statistical efficiency and convenience, to potentially increase the precision of the estimates, and to allow parameter estimates to be established for subgroups of its population (Pedhazur & Pedhazur Schmelkin, 1991).

The variable of interest in each of the three datasets is ethical leadership (see Figure 1). A 16-item adaptation of Brown, Treviño and Harrison’s (2005) measure of ethical leadership present in all three surveys was modeled, tested, and replicated in each of the three datasets to assess the psychometric appropriateness of the adapted measure (Appendix A contains the Brown et al., 2005 measure and the 16-item adapted measure). These datasets have only been examined independently by DND to report univariate statistics by rank, region and demographic characteristics and have rarely been used in a theory-testing manner.

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\(^1\) The eight L1-organizations are: Chief of the Land Staff, Chief of the Air Staff, Chief of the Maritime Staff, Chief Military Personnel, Assistant Deputy Minister (Materiel), Operational Command, Assistant Deputy Minister (Information Management), and Vice Chief of Defence Staff.
Figure 1: Analytical Framework

Rectangles represent objective indicators; ovals represent latent constructs.

Figure 1: Analytical Framework depicting all paths tested in program of research.
Chapter Two: Follower Rank, Context, and the Moderating Role of Follower Ethical Predispositions on their Perceptions of Ethical Leadership

Purpose

Study 1 examined ethical leadership as an outcome variable to determine if it is influenced by factors such as the follower’s rank, workplace context, and ethical predispositions. The purpose of the first study was to see whether a follower’s rank and ethical predispositions are related to their perceptions of their leader’s ethical leadership in two workplace contexts, namely, (a) inside the technical core of the organization, and, (b) outside the technical core (i.e., a boundary-spanning position). Thompson (1967) asserted that employees who work outside the technical core of the organization, in a boundary-spanning position, are likely to encounter more value conflicts and ethical ambiguity. Hence they require more guidance from the leader in the course of their duties than those employed within the organization’s technical core. Thompson illustrated the concept of a boundary-spanning position with the example of a procurement officer. Procurement officers, Thompson stated are relatively powerful when needed organizational resources are scarce, but less so when the same inputs are plentiful. According to Thompson, organizational responses to boundary-spanning positions vary by virtue of the task environment, which can be characterized as stable, dynamic, homogeneous, or heterogeneous. However, no empirical evidence to date support Thompson’s proposition empirically. Budd (2004) argued that the ethics of utility, duty, fairness, virtue, and care shape employment outcomes. Hence, they should be investigated to assess their importance to policy formulation. These ethical beliefs are likely captured by the ethical predispositions of utilitarianism and formalism operationalized in this study (Brady, 1985; Brady & Wheeler, 1996).
Traditionally, questions pertaining to the dispositional makeup of parties to the employment relationship have focussed on the leader. For example O’Keefe (2006) found that the organization’s ethical climate as it relates to rules moderated the relationship between social dominance orientation (SDO) and self-reported unethical behaviour. In arguing for the importance of SDO as a powerful predisposition, O’Keefe asserted that the CF Defence Ethics Program’s focus on the promotion of a strong ethical climate within the Department of National Defence (DND) without considering the dispositional makeup of leaders was inherently flawed. O’Keefe proposed that more research be conducted to identify dispositional factors, that if present in leaders, will influence the ethical behaviour of subordinates. While the veracity O’Keefe’s assertion is not in question, it is argued that even more can be learned if this viewpoint is expanded to first include followers. The CF as an organization contains multiple levels of leadership that are continuously in flux. As an incubator of future leaders at every level of the organization, the person who is at one point deemed a leader is at the same time a follower. This relationship changes regularly as organizational members progress in rank. Thus, the dispositional makeup of followers it is argued is an issue to pursue initially. This is because the CF is a “learning organization” with a strong mandate to develop leaders at all levels early in their careers. Thus, shifting the focal actor from the leader to the follower, and then assessing the impact of followers’ own ethical predispositions on perceptions of ethical leadership might better address O’Keefe’s concern. In doing so, this approach is consistent with leadership categorization theory (discussed below) since the perception of being ethically led must take place in the mind of the follower. An advantage of the present approach is that knowledge of the subordinate’s dispositional makeup, and how it influences perceptions of ethical leadership, will allow the
organization to respond early in a subordinate’s career to make the necessary adjustments in training to better equip that subordinate for future leadership roles.

This chapter addresses gaps in the literature concerning the influence of follower rank/status, workplace context, and follower ethical predispositions on the central concept of ethical leadership. Objective variables examined in this study are typical of the military workplace. They include military rank and operational position (deployed versus not deployed). Both variables, including ethical predispositions, characterize the follower. Perceptions of ethical leadership are operationalized as subordinates’ ratings of their immediate supervisors’ ethical leadership - all the way up the chain of command. The chain of command itself serves as a useful symbol for the status achieved and training completed by virtue of one’s rank in the organization. Rank and status are therefore used to depict one’s level in the organizational hierarchy.

**Rank and Status**

While there are numerous theories in the organizational sciences that can elucidate aspects of one’s occupational level, the present organization reflects the linkage of two key processes – identification and categorization. Therefore, social identity theory (Ashforth & Mael, 1989), leadership categorization theory (Lord et al., 1984), and social cognitive theory (Bandura, 1977; 1986), the latter functioning as the linking mechanism, work best to explain rank/status in the context of this organization.

Social identity theory (Ashforth & Mael, 1989) explains how workers may come to define their occupational level in an organization by segregating themselves into identifiable categories. This segregating function serves the purpose of allowing organizational members to both define and order their social environment. In the CF, this type of segregation is both
implicit and explicit. In the present context, workers’ occupational levels are segregated by virtue of their military rank, which is partly acquired after successful completion of proscribed training that allows the progression from lower ranks to higher ranks. Other factors taken into consideration for progression include tenure/work experience, language ability, and education. In the present organization, the segregating function of rank is overt and formalized in regulations that go so far as prohibiting junior ranking members from fraternizing with senior ranking members. Thus, an understanding of how rank can influence perceptions of ethical leadership can be explained through a process of categorization and identification.

Leadership categorization theory (Lord et al., 1984), sometimes referred to as an “off-shoot” of social identity theory in the literature, posits that a leader’s effectiveness is determined by the perceptions of followers. Followers base their leader’s performance expectation on hierarchically fixed leader prototypes organized in decreasing order of abstraction. Expectations of lower level leaders are considered the most specific or least abstract. Leadership is being perceived as a leader. A leader’s success is determined by meeting the expectations of followers. The uniqueness of this approach is that it views leadership from the perspective of the followers’ perceptions. Leadership is a label that followers confer on the leader. Thus leadership is a psychological process that is partially explained by the process of categorization (Haslam, 2004) and social cognitive theory serves to link the functional identification of rank with the labelling process of leadership.
To ensure familiarity with the Canadian military rank structure, and to demonstrate the strict hierarchical ordering of the supervisory task, Figure 2 is provided below (also see accompanying footnote for further clarification).²

² The four over-arching CF rank groupings in ascending order of status and training are: Junior Non-commissioned member (JrNCM), Senior Non-commissioned member (SrNCM), Junior Officer (JrO), and Senior Officer (SrO). These rank groupings are delineated further by an understanding of who the immediate supervisor of each respondent would be. For example, a JrNCM at the rank of Private, is normally supervised by a Corporal; a Corporal is supervised by a Master Corporal; and, a Master Corporal is supervised by a Sergeant. For SrNCMs, a Sergeant is normally supervised by a Warrant Officer; a Warrant Officer is supervised by a Master Warrant Officer; and, a Master Warrant Officer is supervised by a Chief Warrant Officer. Similarly for officers, within the rank of JrO a Second-Lieutenant is normally supervised by a Lieutenant; a Lieutenant is supervised by a Captain; and, a Captain is supervised by a Major. Finally, for SrO’s, a Major is normally supervised by a Lieutenant-Colonel; a Lieutenant-Colonel is supervised by a Colonel; and a Colonel is supervised by a General.
Figure 2: Military Rank Hierarchy

Senior Officer (SrO)
- General
- Colonel
- Lieutenant-Colonel
- Major

Junior Officer (JrO)
- Captain
- Lieutenant
- Second-Lieutenant

Senior Non-Commissioned Member (SrNCM)
- Chief Warrant Officer
- Master Warrant Officer
- Warrant Officer
- Sergeant

Junior Non-Commissioned Member (JrNCM)
- Master Corporal
- Corporal
- Private

*Figure 2:* Military rank hierarchy depicting rank compositions within the four groupings of JrNCM, SrNCM, JrO, and SrO.
As discussed earlier, the progression from lower ranks to higher ranks is dependent on several factors such as tenure/work experience, language, education, and institutional training with the latter considered paramount. In order to illustrate how rank is tied to training in the present context, a brief examination of human capital theory (Becker, 1964) is warranted. Human capital theory (HCT) focuses on the productivity gained by workers through investments in training. Training can take the form of on-the-job training, general training such as education, and firm-specific training such as military training. Consistent with HCT, progression through the military rank hierarchy is proportional to the amount of firm-specific military training (including ethics training) received at each level of the organization. Although HCT predicts that purely firm-specific training should be non-transferable, Becker (1964) contends that the military offers forms of training that are extremely useful in the civilian sector; training in leadership and ethics stand out as prime examples.

The achievement of professional competence that is commensurate with rank is enshrined as a principle of leadership in CF leadership doctrine and in the CF’s professional development framework. One of the conditions cited in the CF’s leadership doctrine deemed necessary for its leadership philosophy to thrive is leader development (Hillier, 2005). The CF promotes a continuous learning environment throughout the careers of its members over various developmental periods (DPs) (five for NCMs and four for officers) and various qualification levels (QLs) that are linked to one’s rank. DPs involve progressive increases in levels of accountability, responsibility, authority, competency and leadership ability while QLs follow a numbering system from 0-8 for NCMs (where 0 is considered basic and 8 is
advanced) and classified as either basic, intermediate, or advanced for officers (Defence Administrative Orders and Directives 5031-8, 2003).

Training in ethics is also a component of the education received by both officers and NCMs in the CF. Winslow (1997) chronicled the differences in training between officers and NCMs – especially among the lower ranks. Officers for example receive specific lectures on ethics, the Canadian military ethos, morality, and moral obligation and the training is often structured as a formal coursework from a recognized university. NCMs receive training that is less structured and covers topics such as personal and military values. The Defence Ethics Program (DEP) (discussed later) was also designed as an initiative to increase ethics awareness and ethics education in the CF for both NCMs and officers. Thus, it is argued that rank is a correlate for training in this context and rank’s importance is underpinned by the notion that leaders can influence the ethical behaviour of their subordinates (Kronzon, 1999) and, training in ethics will influence organizational members at each level in the chain of command (Pfeifer & Owens, 2002). Similarly, rank is also synonymous with status in a military organization since the perceived importance of one’s position as well as the expectations placed on the incumbent also increases with rank. High status individuals for example are treated and also act as though they have a greater capacity to perform than low status individuals (Berger & Webster, 2006). Further, status due to rank in the military functions as a symbol of authority used to trigger mechanical compliance in followers (Cialdini, 1984). The latter is especially important in deployed scenarios since such environments are often characterized by limited information given to followers (also colloquially referred to as the “need to know principle”) as well as limited time to process
information. In the extreme case of combat operations, mechanical compliance is relied upon exclusively.

Levine and Butler (1952) first operationalized the mechanism describing how perceptions are shaped by rank or occupational status. In a series of controlled experiments these researchers demonstrated that regardless of a worker’s actual performance on the job, their ratings of performance were not tied to the task, but instead tied to the perceived importance of the job – lower level workers were scored lower than higher level workers even though they performed identically on a given task. In other words the “halo-effect” spilling-over from one’s job level results in the tendency for raters to rate the job and not the person (Levine & Butler, 1952). To show that the inverse also holds, that is followers’ perceptions are shaped by the status of their leaders, Sherif et al. (1955) in a series of controlled experiments demonstrated that individual perceptions such as variations in judgement of performance were significantly related to status in a group - and the extent of over and under estimation in assessments was positively related to status rankings. These researchers demonstrated that the higher the rank of the individual being judged, the greater was the likelihood that the performance of that individual would be over-estimated. The opposite occurred for lower ranking individuals – the lower the status of the individual being judged, the less likely it was that that individual’s performance would be overestimated; Sherif et al. (1955) suggested that performance may even be underestimated in the latter scenario.

Thus, informed by the above research, it is likely that lower ranks will rate their proximal leaders lower on a perceptual measure such as ethical leadership, and higher ranks will rate their proximal leaders higher with any resulting over and under estimation in
assessments explained by differences in rank and status. This is also consistent with Lord et al.’s (1984) leadership categorization theory (LCT) since the leadership prototype represented by JrNCMs according to LCT contains the most specific leader prototype (relative to higher ranks) implying an unambiguous set of expectations for junior proximal leaders to live up to before their followers confer any positive leadership attributions onto the person fulfilling the role of the leader. As one moves up the organizational hierarchy, LCT states that follower expectations of their leader become less specific and involve a greater degree of abstraction suggesting that higher ranks will rate their own proximal leaders higher than their junior counterparts – this is again consistent with Sherif et al.’s (1955) finding that senior ranks will tend to over-estimate their judgements simply by virtue of their status in the organization. To further support the latter notion, and to also demonstrate the dichotomy between the attitudes of JrNCMs (the lowest status group in the military hierarchy) with that of all other ranks who are higher in status, Borgatta (1955), using a US military sample demonstrated that there existed a parallelism of attitudes that were also a function of status such that high status groups were closer to each other in attitudes than low status groups. In Borgatta’s study dealing with the US Air Force’s promotion and reward system, conducted at the Harvard Laboratory of Social Relations in 1955, both high status officers and high status NCMs such as SrNCM’s, were closer in their assessments of their proximal leaders than the respective low status group (such as JrNCMs). Specifically, individuals who believed there to be adequate opportunities for advancement (SrOs and SrNCMs) were less critical of the Air Force compared to those who were actually trying to improve their status position or rank in the organization (JrNCMs).
Finally, as discussed previously, one of the tenets of social cognitive theory is that one’s ranking or status relative to others in a group enhances the cuing function of modeled conduct. Thus, status operationalized as rank in these studies is argued to play a key antecedent role in shaping attitudes towards one’s leader because consistent with human capital theory (Becker, 1964), training in the present context has been established as a correlate for rank. Therefore it is expected that followers’ perceptions of their leaders’ ethical leadership will be influenced by their own respective rank in the organization. This leads to the first hypothesis in this program of research:

\[ H1: \text{There is a positive relationship between follower rank/status and an individual’s perception of their supervisor’s ethical leadership.} \]

**Deployment as a Boundary-Spanning Position**

Max Weber first introduced the concept of an organizational boundary in 1947. Weber (1947) stressed that what can be considered to be an organization by outsiders is distinguished by the fact that membership inside such an entity is a result of subordination to rules, enforced by authorities. A boundary-spanning role therefore, is one where the activities of organizational members serve to functionally relate the organization to its environment (Adams, 1980). Functional relations, according to Adams (1980) consist of five primary activities:

1. Transactional activities involving input acquisition and output disposal;
2. Filtering of the inputs and outputs;
3. Information search and compilation;
4. Representing the organization; and,
5. Protecting and insulating the organization from external threats.
In the Human Resources Management literature, Russ et al. (1998) argued that persons in boundary-spanning positions are able to maintain their influence and power primarily through the management of information. Thompson (1967) illustrated the latter concept in a military organization using the example of United States (US) Air Force aircrews operating B-50 aircraft in the 1950s. In this example, ten-person aircrews forming an organizational unit were assigned to each aircraft but were embedded in a larger organizational wing, which was ultimately embedded in the larger US Air Force. The aircrew in this example became the grass-roots unit representing the wing’s structure. Due to the nature of the task environment, both in peacetime and in war, the effectiveness of the Air Force was dependent on the instantaneous adjustment of crew activities where communication needed to be direct and unambiguous.

In terms of ethics, Thompson (1967) asserts that values conflicts and ethical ambiguity are likely manifestations to be encountered by those employed in boundary-spanning positions. Thompson (1967) further asserts that employees in boundary-spanning positions because of the instability of that environment and consequent requirement for more information processing, will require more monitoring and a greater degree of ethical guidance from their supervisors compared to those employees within the organization’s stable technical core.

A unique boundary-spanning position in this study is assessed using a dichotomous variable for an individual’s physical workplace in the military – either deployed (boundary-spanning position) or not deployed (working within the technical core of the organization). An individual who is considered to be deployed for the purpose of this study (and by definition in a boundary-spanning position) recently worked in an environment that the
military deems an “operational theatre” - either a humanitarian mission or a “war zone” – the most likely at the time of this survey being Afghanistan.  

Questions of ethics and ethical leadership in such settings have been written about by military historians such as Waltzer (1977), Hartle (1989), and Cook (2004); however no empirical studies to date have examined the construct of ethical leadership in such a setting nor has such a setting ever been used in the context of administrative theory to elucidate the concept of boundary-spanning. The uniqueness of the deployed variable makes salient what Hartle (1989) referred to, as “special norms” or distinct characteristics of the military profession related to a military member’s unlimited liability – a military term coined by General Sir John Hackett in 1983 which speaks to the nature of the risk and the special covenant between a soldier and the nation (which can lead to the sacrifice of one’s own life in the course of duty), that supersede moral considerations applicable to civilian members of society. Gabriel, (2007) asserts that there is a difference in the ethical issues that confront a soldier compared to those confronting a civilian. Although moral considerations of this type may be deemed situational, given that the military allows for the lawful taking of life in the performance of duty, the fact remains that few soldiers in deployed scenarios, by virtue of their low rank, unlike their higher ranking leaders are likely to have received much training in recognizing and resolving ethical dilemmas. Because leaders in deployed scenarios can and do take actions that lead to the loss of life of persons under their command, Hartle (1989) argued that the military profession is necessarily constrained from applying personal morality in the execution of professional functions. This constraint it is argued contributes to negative perceptions of leaders –

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3 The Your-Say survey does not explicitly survey members engaged in combat operations. The presence of this variable captures those members in transition on either pre-deployment training or on post-deployment/reintegration leave immediately following a combat operation.
especially in ethically ambiguous and morally intense situations often encountered in deployed scenarios. In the opposing condition, when an individual is protected within the “technical core of the organization” – or not deployed, ethical ambiguity and values conflicts are less likely and far less severe in terms of moral intensity requiring less ethical guidance from the leader. Therefore it is argued that employment in a boundary-spanning position will be deleterious to perceptions of ethical leadership and thus perceptions of ethical leadership will be rated lower by subordinates who are deployed than by subordinates who are not deployed.

*H2: There is a negative relationship between deployed and an individual’s perception of their supervisor’s ethical leadership.*

**Janus-Headed Model of Ethical Theory**

The term Janus was adapted from Roman mythology and refers to the god of beginnings and endings. The deity Janus was depicted on ancient Roman coins as a head with two faces – one looking forward and the other in the opposite direction. Brady’s (1985) Janus-headed model of ethical theory asserts that individuals have two “ethical faces” – one that is forward looking and utilitarianistic based on teleological ethical theory, and one that is retrospective and formalistic based on deontological ethical theory. Brady used these concepts to represent complementary processes rather than mutually exclusive frameworks, and therefore originally proposed that they operate at opposite ends of a single continuum. However, in a test of the Janus-headed model, Brady and Wheeler (1996) found that utilitarianism and formalism “seemed” to be separate constructs rather than a continuum. Earlier, Brady (1985) argued that many situations can and do involve both utilitarian and formalistic concerns operating concurrently, however this proposition was never empirically
tested and represents a persistent gap in this literature. According to Brady and Wheeler (1996), one of the most important developments in all of ethical theory is the distinction between formalism and utilitarianism. The basis for Brady and Wheeler’s assertion is that ethical theory suggests that there is consistency between how people think and what they ultimately decide. In other words, one’s rationale informed by one’s predispositions often dictates one’s choice of a solution to a particular problem or dilemma.

Formalism, or deontological ethical theory is based on the early writings of German philosopher, Immanuel Kant and describes a moral philosophy where rules, integrity, duty and obligation are inherent. Formalism, as a philosophy is agent-relative and holds that moral values and the adherence of standards are independent of any consequences. Thus, the goodness or badness of an action is determined by whether rules were broken in the process. In the organizational behaviour literature, Reynolds (2006) demonstrated that formalists were able to recognize both harm and the violation of norms in a given ethical dilemma while utilitarians could only recognize harm. Therefore, according to Reynolds, formalism is representative of a more advanced level of cognitive moral reasoning. In the present context it is argued that those at higher ranks who have more training and are more advanced in their cognitive moral development will draw upon formalism as a predominant pattern of thinking.

Utilitarianism according to Brady and Wheeler (1996), describes an ethical theory that is referred to as the teleological perspective, which is characterized by results or consequence-based ethics. Under this agent-neutral approach, a leader would assess an ethical situation in terms of the end result or consequences that it would have for either the leader or his/her subordinates. Thus a key tenet of utilitarian moral philosophy is that the moral correctness of an act is determined by the non-moral value of the consequence
(Darwall, 2003). The latter is inherent in Gabriel’s (2007) view that the military’s emphasis on mission success or operational effectiveness can lead to “perverse utilitarianism” whereby results take precedence over all other factors, including ethical ones. Gabriel further asserts that the latter often leads to a “loyalty syndrome” whereby subordinates come to believe that it is their duty to blindly follow the orders of superiors even if those orders are unethical – calling into question the issue of mechanical compliance discussed earlier. Therefore it is critical that leaders, if they are to be perceived as ethical leaders, ascribe to the more cognitively superior pattern of moral reasoning – formalism, to avoid the possibility of “perverse utilitarianism” and the “loyalty syndrome”. It is therefore argued that military leaders in deployed scenarios predisposed to a pattern of utilitarian thinking will have their ethical leadership agency perceived differently – arguably lower than those predisposed to formalistic thinking. Formalistic leaders it is argued, will rate higher in the minds of likeminded followers on ethical leadership than their utilitarianistic counterparts because ethical leadership by definition places greater emphasis on actions (formalism) than results (utilitarianism). It is further argued that subordinates in similar occupational settings (either deployed or not deployed) will respond more strongly to the ethical leadership of their supervisor if these predispositions are formalistic and align with the leader. The latter is consistent with findings in the extant literature related to value congruence. Specifically, Schminke et al. (2005) demonstrated that congruence between the leader and the follower in terms of moral development had a positive impact on employee attitudes. Thus, an individual with high formalism will rate the ethical leadership of their supervisor higher than an individual with low formalism (or both high and low utilitarianism) when these individuals are deployed. Thus both the type and level of the ethical predisposition as well as
the workplace context become important elements in shaping perceptions of ethical leadership leading to the following hypotheses:

\textit{H3: Utilitarianism moderates the relationship between deployed and ethical leadership such that deployed will have a stronger negative impact on ethical leadership when utilitarianism is high.}

\textit{H4: Formalism moderates the relationship between deployed and ethical leadership such that deployed will have a stronger positive impact on ethical leadership when formalism is high.}

\textbf{Method}

According to Fraser (2007) the practice of data-weighting is commonly used in DND with these types of datasets. The Your-Say survey utilizes a stratified random sample to achieve a sample representative of the CF population. The sample is first stratified by eight “L1-organizations” then by grouped rank in each L1-organization. This program of research uses weighted data for the present study to draw out the influence of being “deployed” into a military theatre of operations on perceptions of ethical leadership. All remaining studies use unweighted data controlling for the stratification variables to better satisfy the condition of randomness thereby making findings more generalizable.

The dataset for this study is the 2007 (Ethics) CF Your-Say survey. The survey was conducted in a field setting with a non-experimental, cross-sectional design. This particular survey poses 167 questions dealing with life satisfaction, career management, work-life balance, supervision, ethical beliefs, ethical decision-making, ethical climate, as well as demographic information. The survey is divided into nine different sections: Military Career, Career Management and Postings, Work-life Balance, CF as a Whole, Your Supervisor,
Defence Ethics, Life Satisfaction, Development of Technologies, and Background. The “focus” section of this survey deals primarily with Defence Ethics. This later section (the focus section) changes from year to year depending on the CF’s research agenda making the aggregation of longitudinal data impossible. According to Fraser (2007), this was the first CF Your-Say survey since its inception in 2004, to incorporate an ethical dimension into the instrument and further, it is the only survey to incorporate the “deployed” variable. The Department of National Defence’s intent regarding the ethics portion of this survey was to collect information on ethical climate and ethical decision-making in the military. As such, this dataset is unique on a number of fronts. First, the content domain and specific wording of survey items allows for the assessment of ethical leadership by subordinates (O’Keefe, 2006). For example, the subheading of the Your Supervisor section is appropriately entitled “What does your supervisor actually do?” – establishing the focal rater as the subordinate and thus reduces social desirability bias. This is important in the context of ethics research because there is always potential for bias in responses whenever research is “normatively-charged” (Brown et al., 2005). Second, because one of the sub-sections of the Focus on Defence Ethics includes ethical beliefs, factor analytic techniques can be used to group different dimensions of these beliefs. Third, the dataset allows for the study ethical leadership across a much larger sample than in most of the extant literature. Finally, a review of ethical leadership literature to date reveals that much of the extant literature focuses almost exclusively on traditional business ethics couched in a private sector context with a characteristic “for-profit” motive. The present study and this program of research will build on some of this earlier work utilizing a public sector/not-for-profit institutional setting thereby extending the reach of ethical leadership theorizing into the government sector.
Participants and Procedures

This dataset is based on a stratified random sample of N = 2,825 drawn from a sample frame of 51,086 with a response rate of 52.6%. The final sample size, after data cleaning was N = 1,487. Missing values on key variables were assessed using the Missing Values Analysis module in SPSS 17. Missing values on key variables were imputed using the Expectation-Maximization (EM) algorithm once it was confirmed that these data were missing completely at random (MCAR). This allowed for subsequent analyses such as Hierarchical Multiple Regression and Confirmatory Factory Analysis with other study variables to use listwise deletion as a conservative method for dealing with missing data when sample sizes are large.

This data can be uniquely stratified across a number of different demographic and workplace variables that also have generalizability outside of the military such as between labour, first-line supervision, middle management, and senior management in the private sector. The sample composition was 86% male. On average respondents were between the ages 25 to 44 years of age with 22% of the sample greater than 45 years of age and 5% of the sample less than 24 years of age. Average tenure was 19.2 years. Sixty-one percent of respondents reported educational attainment greater than high school. Thirty percent of respondents reported French as their first official language and, 3% reported being deployed. The unweighted rank representation of this sample was: 28% JrNCM, 30% SrNCM, 21% JrO, and 21% SrO. When data was weighted utilizing official DND weights supplied as a

4 Violation of the MCAR assumption can lead to biased estimates produced by the listwise, pairwise, and regression methods. If data are assessed as not being MCAR than EM estimation must be used (SPSS, 2007).
“Wt” variable in the 2007 dataset, the rank representation was 56% JrNCM, 24% SrNCM, 12% JrO, and 8% SrO, which is representative of the CF population.

**Measures**

**Ethical leadership.** Brown et al. (2005) empirically validated the ethical leadership construct. This ten-item instrument taps several aspects of the ethical dimension of leadership such as demonstrating normatively appropriate conduct through leading by example, communicating ethics norms to subordinates, disciplining subordinates for ethical violations, and treating subordinates fairly. Brown et al.’s scale was shown to have a reliability coefficient (Cronbach’s alpha) (α) of .92. This measure has been used in the literature in the study of the mediating roles of ethical leadership and work group psychological safety (Walumbwa & Schaubroeck, 2009), in the study of relationships between top management, supervisory ethical leadership, and group-level outcomes (Mayer et al., 2009), and in the relationship between ethical leadership and core job characteristics (Piccolo et al., 2010).

In this program of research, the dimensionality of a 16-item measure of ethical leadership composed from existing survey items that closely aligned with the content contained in Brown et al.’s (2005) scale was assessed. At least one other study in the extant literature supported the notion that ethical leadership could be tapped by the questions contained in the Your-Say survey. Specifically, O’Keefe (2006) asserts that the supervisor behaviour scale (the extent to which respondents perceive that their immediate supervisor displays and encourages ethical conduct as outlined in the CF values of duty, loyalty, integrity, and courage) assesses all aspects of ethical leadership as defined by Brown et al. (2005) and further that CF questionnaires of this type can be used to assess ethical leadership at all rank levels within the CF.
Informed by the work of Brown et al. (2005), the ethical leadership measure was constructed from the 2007, 2005, and 2004 Your-Say survey items. This measure was designed to represent the closest possible mapping of the Brown et al. (2005) ethical leadership construct with these datasets. In order to address concerns of content validity, an exploratory factor analysis was conducted on the items in the “Your Supervisor (What does your supervisor actually do?)” and the “Defence Ethics” sections of the 2007 Spring Your-Say survey instrument. Suitability of the items for factor analysis was established through principle components analysis (PCA) using an oblique rotation (direct oblim) with SPSS version 17. The Kaiser-Meyer-Olkin (KMO) value was .97, exceeding the recommended value of .60 (Kaiser, 1974) and Bartlett’s Test of Sphericity reached statistical significance ($p < .001$), supporting the factorability of the correlation matrix of the 16 Your-Say items (Bartlett, 1954). PCA revealed the presence of one component with an eigenvalue exceeding 1, explaining 60.6% of the variance. Following an inspection of the screeplot, there was a clear break after the first component, suggesting the presence of a unidimensional construct with all items loading strongly on the primary factor. Reliability testing of the ethical leadership scale produced a $\alpha = .96$, well above the recommended value of $\alpha = .70$ (Nunnally & Bernstein, 1994), suggesting that the ethical leadership scale in the present study has excellent internal consistency and is a reliable measure of ethical leadership.

The 16-item adapted ethical leadership measure utilizes a 5-point Likert-type scale (1 = strongly disagree, to 5 = strongly agree), prompting respondents to indicate their level of agreement or disagreement with statements related to the leadership behaviour of their immediate supervisor. One item from this 16-item measure is: “My supervisor makes decisions that are fair and unbiased”. The adapted ethical leadership measure was also tested
for normality using both statistical and graphical methods. The organizational methods literature indicates that a perfectly normal distribution should have symmetry (skewness) and peakedness (kurtosis) values equal to zero (Tabachnick & Fidell, 2007). Screening indicated that this measure was slightly negatively skewed (skewness statistic = -.86), and slightly peaked (kurtosis statistic = .99). The Kolmogorov-Smirnov test was statistically significant \((p < .001)\) initially suggesting the presence of a non-normal distribution.\(^5\) However, further inspection of the histogram and normal probability plot combined with the large sample size indicated that this variable was sufficiently normally distributed because according to Tabachnick and Fidell (2007), variables possessing skewness in large samples often do not deviate to the point where they would adversely affect the results. Addressing the issue of kurtosis, Watermaux (1976) similarly asserts that for large samples, the influence of positive kurtosis disappears with sample sizes of 100 or more cases while with negative kurtosis, this influence disappears with samples of 200 or more. Thus the assumption of normality for the central construct of interest, ethical leadership, can be safely assumed.

Following careful specification of error terms (associated with the indicator variables) informed by theoretical considerations related to the Brown et al.’s (2005) construct definition, Confirmatory Factor Analysis (CFA) using maximum likelihood estimation with AMOS 18 on this measure also supported the presence of a unidimensional construct that fit the data well. An assessment of the latent construct’s fit statistics indicated that this specification produced a satisfactory fit \((\chi^2 = 1107.4, df = 88; p < .001; CFI = .94; RMSEA = \) \(^5\)The Kolmogorov-Smirnov statistic assesses the normality of the distribution of scores on a continuous variable.
However, the issue of correlating error terms or disturbances in structural equation modeling is currently controversial, with one camp of scholars advocating for the use of modification indices to arrive at an appropriate fitting model – one that is neither under-fit nor over-fit (with the former being more problematic) (Wheaton, 1987); while the other camp asserts that there is rarely a sound theoretical basis to correlate error terms and that this practice should be avoided (Cortina & Bludau, 2007). Simply put, allowing error terms to correlate exaggerates the fit indices (biasing them upwards) often resulting in a good-fitting but impractical model because such a model may be impossible to replicate. Much of the extant literature found in scientific journals that utilize structural equation modeling is conspicuously silent on this issue. Thus, in order to provide a more conservative test of model fit, this model was re-specified without allowing the error terms to correlate. The resulting model was only marginally worse than its predecessor but still deemed acceptable ($\chi^2 = 1523.64, df = 104; p < .001; CFI = .92; RMSEA = .10; PNFI = .79; N = 1487$) demonstrating that the adapted ethical leadership construct does not need to be re-fitted to proceed with later specifications of structural models. The mean of ethical leadership in the weighted sample was 3.70 ($SD = .78$) and in the unweighted sample was 3.74 ($SD = .72$).

**Rank.** Rank functions as an objective indicator across all three surveys. The four rank groupings of Junior Non-commissioned Member (JrNCM), Senior Non-commissioned

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6 Comparative Fit Index (CFI): values close to 1 indicate a very good fit (Bentler, 1990; Arbuckle, 2009).
7 Root Mean Square Error of Approximation (RMSEA): values of .05 or less indicate a close fit in relation to degrees of freedom; values greater than .10 are indicative of a poor fitting model (Arbuckle, 2009).
8 Parsimony Normed Fit Index (PNFI): adjusts for the complexity of the model (James, Mulaik & Brett, 1982).
Member (SrNCM), Junior Officer (JrO), and Senior Officer (SrO) can be further subdivided to indicate how individuals are nested within these groupings. Rank was used both as a dichotomous measure: junior ranks versus all others (who are more senior), and as a continuous measure with 14 categories (Private to General).

**Deployed.** The deployed variable functions as an objective indicator and was only available in the present dataset. This variable is coded as a dichotomous measure signifying whether or not the respondent considers himself/herself to be working (or recently worked) in an operational theatre of war, or a humanitarian mission. The wording of this measure was: “Are you currently on operational deployment?” (Either, yes = 1, or no = 0). Thus, this variable denotes the presence or absence of what the literature refers to as a boundary-spanning position. As stated earlier, employees working in boundary-spanning positions, in this case who are deployed, require more ethical guidance from their leaders because they are exposed to a greater likelihood of values conflicts and ethical ambiguity than their counterparts who are not deployed, or working within the “technical core” of the organization (Thompson, 1967).

The weighted sample characteristics for deployed respondents was: N = 52 representing 4% of the overall sample (homogeneity of variance could not be assumed); 97% were male with an average of 12 years tenure; 69% reported education levels greater than high school; 44% reported French as their first official language; 52% were married working an average of 53.4 hours per week; and, 82% of deployed respondents were at the rank of JrNCM.

**Ethical predispositions.** Properties of ethical predispositions were informed by Brady and Wheeler’s (1996) conceptualization whereby utilitarianism embodied the traits:
innovative, resourceful, effective, influential, results oriented, productive, and a winner, and formalism embodied the traits: principled, dependable, trustworthy, honest, noted for integrity, and law-abiding. Factor analytic techniques were utilized on the Defence Ethics section of the Your-Say survey to operationalize measures for these constructs. Specifically, fifteen items were selected from this section of the survey and subjected to PCA; as with the ethical leadership measure, the suitability for PCA was assessed by analyzing a correlation matrix to identify coefficients of the magnitude .3 or higher. The KMO value was .81, and Bartlett’s Test of Sphericity reached significance ($p < .001$). PCA revealed the presence of four components with eigenvalues greater than one explaining 25.0%, 15.3%, 9.7%, and 7.0% of the variance respectively. An inspection of the screeplot revealed a break after the second component. Following retention of the two components, a two-factor rotated solution (direct oblim) yielded variances of 25.0% on component one, and 15.6% on component two. This simple structure revealed strong loadings on items that were consistent with the conceptualization of utilitarianism and formalism. One, 4-item scale (utilitarianism) and one, 11-item scale (formalism) was constructed and subjected to reliability analysis. Both scales prompted respondents to indicate their level of agreement with statements related to their own ethical beliefs on a 5-point Likert-type scale (1 = strongly disagree to 5 = strongly agree). An example of one item from the utilitarianism measure is: “The most important consideration in reaching a decision is the consequences of the decision for me personally”. An example of one item in the formalism measure is: “It is important to follow the law and/or regulations at all times”. Both scales yielded $\alpha$ values of .70. When subjected to CFA, utilitarianism yielded the following fit statistics ($\chi^2 = 16.38, df = 2; p < .001; CFI = .99; RMSEA = .07; PNFI = .20; N = 1487$) indicating that this model fit the data well.
However, the fit statistics for formalism, despite its strong deontological content indicated that the formalism measure did not fit the data as well ($\chi^2 = 820.92, df = 44; p < .001; CFI = .64; RMSEA = .11; PNFI = .41; N = 1487$). Although these latter fit statistics could be substantially improved through respecification with the use of modification indices (see footnote below), for the reasons stated earlier, a conservative approach was maintained and error terms were not allowed to correlate.$^9$ The mean of utilitarianism was $2.82$ ($SD = .80$), and the mean of formalism was $3.69$ ($SD = .44$).

**Controls.** The rationale for controlling the effects of certain variables germane to morally charged research is most effectively described through the lens of Kohlberg’s (1969) cognitive moral development (CMD) theory. Kohlberg’s theory is a framework for describing how individuals in an organization reason when faced with ethical dilemmas. The theory describes how the thinking process involved in moral decision-making becomes more intricate as an individual progresses through their life-course. Kohlberg’s framework includes three hierarchical levels of CMD, each having two stages embedded in each level: Preconventional (stages one and two), Conventional (stages three and four), and Principled (stages five and six). An individual’s moral development is represented by where one is positioned on this framework (both level and stage). Passage from a lower stage to a higher stage occurs as an individual progresses in their moral development.

Turner and Barling (2002) abridge Kohlberg’s CMD Theory asserting that as individuals progress through their life course, acquiring greater education and life

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$^9$ Correlating error terms with the following three formalism items produced an acceptable fit: “An action that violates the law is always wrong”, “Rules and laws are the most appropriate basis for making ethical decisions”, and “Society’s laws and organizational regulations define what is right and wrong” ($\chi^2 = 575.45, df = 41; p < .001; CFI = .74; RMSEA = .09; PNFI = .46; N = 1487$).
experience, their values are shaped differentially by where they live and work, and they progress through various stages of moral development at different rates and to different degrees. These authors also suggest that in the context of the workplace, subordinates’ moral reasoning ability could influence their perceptions of what constitutes valued leadership behaviour.

The application of Kohlberg’s CMD theory, to this program of research implies that an individual’s tenure in an organization could be correlated with one’s moral development. In the case of ethical predispositions, Brady and Wheeler (1996) also found age to be a powerful determinant with older respondents preferring formalism and younger respondents preferring utilitarianism. Thus, older individuals as well as individuals with greater tenure could perceive ethical leadership higher, because ethical leadership by definition contains both conventional and principled elements in line with CMD Theory. Less experienced individuals with fewer years of experience could therefore be expected to perceive ethical leadership lower. This is consistent with typical military enrolments whereby individuals can enlist as early as sixteen years of age and the mandatory retirement age is sixty. Also, given the fact that the majority of individuals that are deployed into a theatre of operations are lower ranking soldiers, in other words “the fighting force” (typically Privates, Corporals, and Master Corporals), it is plausible that perceptions of ethical leadership might vary based on rank and thus rank should also be controlled when making assessments in the deployed condition.

In order to address concerns in the extant literature to the question of whether demographics matter in morally charged research (Brown & Treviño, 2009; Brown et al., 2005; Brady & Wheeler, 1996; Rest, 1986; Gilligan, 1982), age, gender, tenure, education,
marital status, hours worked, and L1-organization were controlled in these studies. French language was also controlled to address the concern of some scholars regarding the tension between French Canadians and Anglophone Canadians. Some research has found that despite Canadian pluralism, the French Canadian minority group still perceives a threat to their cultural identity through pressures to assimilate (Berry & Kalin, 1995; Cox, 1994). This pressure to assimilate, it is reasoned could plausibly manifest in tension between French and Anglophone respondents and could result in biased findings. Thus French language will be controlled in this program of research.9

L1-organization was not controlled when utilizing weighted data.

Analytic Strategy

In the first step of the analyses the central variable of interest – followers’ perceptions of their immediate supervisor’s ethical leadership, was correlated with objective measures indicating the followers’ rank and a dichotomous measure indicating employment in a boundary-spanning position or, being deployed. Concurrently, followers’ own ratings of their ethical predispositions of formalism and utilitarianism were also correlated against the ethical leadership variable. In order to establish whether statistically significant relationships exist between the variables above and to describe the strength and direction of such effects, Pearson product-moment correlation analysis, partial correlation (accounting for the control

9 Note, CF combat missions to Afghanistan are sourced regionally. During the data collection phase, surveys were completed within the first three weeks of June 2007. At that time, 2 Royal Canadian Regiment (2 RCR) – a predominantly English speaking Regiment was “in theatre” in Afghanistan. It was not until the next troop rotation - 15 July 2007, that troops were sourced from a predominantly French speaking Regiment (Royal 22e Regiment) based out of Valcartier Quebec. This is further rationale for controlling first official language in this program of research.
variables), and ordinary least squares regression analyses were utilized. Other empirical procedures used post hoc in this study consisted of independent samples t-tests for situations involving a continuous dependent variable and a categorical independent variable with two groups, and analysis of variance (ANOVA) utilizing the Tukey Honestly Significant Differences post-hoc test to identify specific pairs of statistically significant groups (at $p < .05$) for situations involving a continuous dependent variable and a categorical independent variable with more than two groups.

The next step of the analyses utilized hierarchical regression to test for the presence of statically significant interaction effects and to assess the unique variance attributed to such effects. In order to maximize interpretability and to minimize problems of multicollinearity, continuous variables were centered on their respective means (Aiken & West, 1991).

**Results**

Table 1 contains correlations, descriptive statistics, and reliabilities for the measured variables for both the weighted and unweighted sample. Table 1 also incorporates the weighted rank representation of this sample adjusted to reflect a proportional representation of ranks in the CF at the time of the 2007 survey (weighted results are presented above the diagonal) since the practice of data-weighting is common with these types of datasets in the CF (Fraser, 2007). Table 1 also presents the unweighted results below the diagonal.

**Correlation and multiple regression.** Hypothesis 1 predicted that there would be a positive relationship between followers’ rank and perceptions of their supervisor’s ethical leadership. The relationship between rank and ethical leadership was tested using Pearson product-moment correlation and hierarchical regression accounting for the control variables (age, gender, tenure, level of education, first official language, marital status, and hours
worked per week) (see Table 2). Results of the correlation analysis indicated there was a small, negative correlation between rank (JrNCM) and ethical leadership ($r = -.15, n = 1428, p < .01$) and a small positive correlation between rank (continuous) and ethical leadership ($r = .15, n = 1428, p < .01$). Utilizing a two-step hierarchical multiple regression model with controls entered in the first step, the main effect of rank in the second step indicated the presence of significant main effects ($\beta = -.20, p < .01$). The total variance explained by the model was 7%, $F(8, 1344) = 11.99, p < .001$ (see Table 2). These results indicate that ratings of ethical leadership increased as rank increased and support Hypothesis 1.

Hypothesis 2 predicted that the boundary-spanning position as indicated by deployed followers would negatively relate to perceptions of ethical leadership of their supervisors. In other words, being deployed was predicted to hurt perceptions of ethical leadership. There was a small negative correlation between deployed and ethical leadership ($r = -.11, n = 1428, p < .01$) indicating that perceptions of ethical leadership were perceived lower when individuals were deployed compared to when they were not deployed. An independent-samples t-test also confirmed that there was a statistically significant difference in the means of ethical leadership between deployed ($M = 3.28, SD = 1.00$), and not deployed individuals ($M = 3.72, SD = .77$); $t(1444) = 3.13, p = .003$ (two-tailed). The magnitude of the differences in the means (mean difference = .44, 95% CI: .16 to .72) was small ($\eta^2 = .01$) (Cohen, 1988) and equal variances could not be assumed. Again, utilizing a two-step hierarchical regression with controls entered in the first step, the main effect of deployed in the second step indicated the presence of significant main effects ($\beta = -.13, p < .001$). The total variance explained by this model was 6% $F(8, 1344) = 5.51, p < .01$ (see Table 2). This finding
indicates that being deployed had a deleterious effect on followers’ perceptions of the ethical leadership of their supervisors and supports Hypothesis 2.

**Hierarchical multiple regression.** Hypotheses 3 and 4 predicted that ethical predispositions of the follower would interact with the boundary-spanning position of being deployed and thus moderate follower perceptions of the ethical leadership of their immediate supervisor. Specifically, Hypothesis 3 predicted that the ethical predisposition of utilitarianism would interact with the deployed variable resulting in a stronger negative effect on follower perceptions of ethical leadership when utilitarianism was high (1 standard deviation above the mean). In Hypothesis 4, formalism was predicted to have the opposite effect. Namely, formalism was predicted to interact with deployed such that ethical leadership would be perceived higher by followers when formalism was high.

To test the hypotheses that ethical predispositions interact with the deployed variable (Hypothesis 3 and 4), thereby moderating ratings of ethical leadership, a three-step hierarchical multiple regression framework (see Table 3) was initially modeled (Aiken & West, 1991). The first step contained all of the control variables (age, gender, tenure, level of education, first official language, marital status, hours worked per week, and rank). The second step added the main effect variables: utilitarianism, formalism, and deployed. In the third step, the presence of statistically significant two-way interaction effects: utilitarianism x deployed ($\beta = -.25, p < .001$) and formalism x deployed ($\beta = .11, p < .01$), indicated that followers who were deployed and highly predisposed to utilitarianism rated their immediate supervisor’s ethical leadership lower than otherwise; Conversely, followers who were deployed and highly predisposed to formalism rated their immediate supervisor’s ethical leadership higher than otherwise. These latter findings provided sufficient evidence to
support hypothesis 3 and 4 respectively and cast further doubt on the treatment of ethical predispositions as mutually exclusive constructs.

**Ancillary analysis.** The presence of concurrent significant two-way interaction effects – one for utilitarianism and one for formalism indicate that ethical predispositions are not mutually exclusive and suggest that an individual can possess a level of both utilitarianism and formalism that is consistent with ethical theory. Further consideration of these relationships required the post hoc specification of a three-way interaction model. Specifically, the three-way interaction of utilitarianism x formalism x deployed was entered into the model as a fourth and final step and produced a significant three-way interaction effect ($\beta = -.07, p < .05$). The total variance explained by the model as a whole was 12.4%, $F(14,1338) = 13.08, p < .001$. The unstandardized regression coefficients and the constant from the latter regression equation were then used to plot the relationship between ethical predispositions and the boundary-spanning position (the three-way interaction of utilitarianism x formalism x deployed) at both one standard deviation above and one standard deviation below the mean (Aiken & West, 1991; Cohen et al., 2003) (see Figure 3).

The presence of the statistically significant three-way interaction of utilitarianism x formalism x deployed ($\beta = -.07, p < .05$) served to further support Hypothesis 3 and 4, and also functioned to extend ethical theory providing the first known empirical evidence of ethical predispositions operating concurrently in a boundary-spanning situation in a field setting.\(^{10}\)

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\(^{10}\) To allay possible concerns regarding construct validity given the coarse nature of the JrNCM rank variable, hierarchical analysis was also conducted using rank as a continuous variable with 14 gradations. Using Rank(continuous) in place of Rank(JrNCM) had no effect on the results.
Figure 3: 2007 (Ethics) Dataset (weighted) – Plot of interaction of Utilitarianism x Formalism x Deployed, controlling: age, male, tenure, education, French language, married, hours worked, and rank

Figure 3: Ethical leadership as a function of the boundary-spanning position (deployed or not deployed) at high (+1 SD) and low (-1 SD) levels of follower ethical predispositions (utilitarianism and formalism).
Discussion

Two research questions were asked and answered in this study: Does followers’ rank/status in an organization influence their perceptions of their leader’s ethical leadership? And do ethical predispositions of the follower alter perceptions of their leader’s ethical leadership in different workplace contexts? Support for Hypothesis 1 provided additional evidence of the role of both social cognitive theory and leadership categorization theory in understanding ethical leadership and suggested that rank/status is antecedent to perceptions of ethical leadership. Ethical leadership is perceived higher, the higher one’s rank in the organization, with ratings by the lowest category of rank (JrNCMs) negatively associated with ethical leadership. This finding reinforces Treviño et al.’s (2008) notion, supported by social identity theory, that senior managers’ perceptions involving ethics are perceived more favorably than those of lower-level organizational members. From a social identification perspective, this indicates that the higher the rank of the individual, the more that individual will be inclined to protect their organizational identity because they have invested more into the organization in terms of tenure and training than their lower ranking counterparts. From a leadership categorization perspective, this finding demonstrates that follower expectations of their leaders are most specific at lower levels and predictably leaders are “marked the hardest” by their followers at lower levels in the organization. As organizational members progress in rank they receive more training, their leadership responsibilities broaden, and consequently their own expectations of what constitutes a good leader also become more abstract manifesting in higher ratings given to their direct supervisors. This latter interpretation is also consistent with human capital theory since the perceived importance of the job increases with rank suggesting further that rank is a correlate for firm-specific
training in this context (Levine & Butler, 1952). Social cognitive theory serves to link the process of identification with the process of categorization demonstrating that the agency required to cue normatively appropriate conduct increases with rank. An important practical implication of this finding for organizations is that rank in an organization insofar as it involves the leadership of others should be explicitly tied to firm-specific training (as in the present organization) that is reflective of virtuous organizational values. The CF’s professional development framework therefore serves as a useful model for other organizations interested in competing in a marketplace that is becoming increasingly enthralled with the potential benefits of values-based ethical leadership as a driver of its corporate citizenship strategy.

Hypothesis 2 supported the prediction that certain workplace contexts could be inherently deleterious to perceptions of ethical leadership. An extension of administrative theory, specifically Thompson’s (1967) boundary-spanning concept into the realm of deployed military operations supported the notion that situations involving moral intensity and ethical ambiguity such as being deployed, require more ethical guidance from respective leaders than employment within the technical core of an organization (not deployed). A practical implication of this finding again points to the training function whereby organizational members - especially leaders who must functionally relate the boundary-spanning environment to their organizations through the management of human resources, must be capable of providing the additional guidance required to lead subordinates in this challenging task environment; such capability it is maintained will only arise with continued investments in firm-specific, ethics-based training.

Support for Hypotheses 3 and 4 answered the question of whether ethical
predispositions of the follower could shape perceptions of their leader’s ethical leadership in
different workplace contexts. The significant 2-way interaction of utilitarianism x deployed
in Hypothesis 3 indicates that deployed followers highly predisposed to a utilitarian ethical
framework (1 standard deviation above the mean) perceived the ethical leadership agency of
their immediate supervisor more negatively than otherwise. Similarly, the significant 2-way
interaction of formalism x deployed in Hypothesis 4 indicates that deployed followers highly
predisposed to a formalistic ethical framework perceived the ethical leadership agency of
their immediate supervisor more positively than otherwise. However, consistent with social
scientific research methodology, the presence of significant 2-way interaction effects, in
conjunction with strong supportive theory served as the impetus for post hoc specification
and testing of a 3-way interaction model (Aiken & West, 1991; Cohen et al., 2003).

The presence of a statistically significant 3-way interaction effect involving
utilitarianism and formalism supported by ethical theory (Teleology and Deontology) as well
as Brady’s (1985) Janus-headed model of ethical theory represents an original finding in the
literature. Early ethical predisposition theorizing initially understood utilitarianism and
formalism to be at opposite ends of a single continuum (Fritzsche & Becker, 1984; Brady,
1985). However, Brady and Wheeler (1996) as well as researchers that followed (Schminke
& Wells, 1999; Reynolds, 2006) treated the ethical predispositions of formalism and
utilitarianism as separate constructs. Support was found in this study for the 3-way
interaction of utilitarianism x formalism x deployed, highlighting that utilitarianism and
formalism operate together in deployed work environments. This result represents a new
finding in the literature and functions to extend ethical theory providing empirical evidence
that ethical predispositions can function concurrently in a boundary-spanning position in a
field setting. Since subordinates rated their own utilitarianism and formalism and these same predispositions moderated the relationship between deployed and ethical leadership, this latter finding supports congruence between subordinate and leader ethical predispositions consistent with Schminke et al. (2005) who demonstrated that congruence between the leader and the follower in terms of moral development had a positive impact on employee attitudes. In terms of value congruence between leader-transmitted and follower values, Brown and Treviño (2009) demonstrated that expected effect sizes are small and range from $r = .06$ to $r = .11$. Although it was beyond the scope of the present research to tap actual values transmitted, the bivariate relationship between followers’ ethical predispositions and perceptions of their leader’s ethical leadership could arguably serve as a proxy for value congruence. In this case, the range of values reflected by the utilitarianism and formalism constructs were in a similar magnitude ($r = .08$ to $r = .11$) and reinforce the results found by Brown and Treviño.

Brady and Wheeler (1996), consistent with ethical theory, suggested that individuals make decisions that are consistent with their pattern of thinking. Their study showed that most respondents did not prefer utilitarian reasoning - unlike Fritzsche and Becker (1984) who concluded that practitioners relied almost totally on utilitarian philosophy. The findings of the present study contribute to the resolution of this long-held contradiction in the literature. Although little has been done in the extant literature with ethical predispositions, the rationale that deployed personnel driven by their ethical predispositions identified more strongly with formalistic pattern of thinking and this contributed to higher perceptions of ethical leadership is an important finding and is consistent with at least one other major study in the literature. Reynolds (2006) found that utilitarians could only recognize harm in a
moral situation, but formalists could recognize harm and the violation of norms. The present findings demonstrated that being deployed and highly utilitarian in one’s pattern of thinking lowered ratings of ethical leadership – therefore worsening the chances that normatively appropriate behaviour modeled by the leader would become salient to the follower.

Predictably, low utilitarianism in combination with high formalism produced the highest ratings of ethical leadership in the deployed scenario representing the most favourable conditions for normatively appropriate behaviour modeled by the leader to become salient to the follower. This shows that in a deployed environment a mission-centric, results-oriented mindset, although intuitively appealing especially for this type of organization as reflected in the colloquialism: “Do whatever it takes to get the job done”, does not arise in this real-life boundary-spanning situation and consequently Gabriel’s (2007) notion of “perverse utilitarianism” whereby results eclipse all other considerations (including ethics) is not an issue facing this organization. Rather, in morally charged environments it is a leader’s training, the stalwart adherence to rules of engagement, the leader’s integrity, and the modeling of normatively appropriate conduct that have the strongest influence on followers.

The fact that military historians like Hartle (1989), believe that military leaders are constrained from applying personal moral beliefs in such scenarios may not be a bad thing. Viewed differently, this constraint is arguably necessary in such settings to ensure that the high moral standards and values espoused by the organization and embedded in the leader’s training as a whole are allowed to manifest. This finding further underscores the complexity of the psychological mechanisms at play in such scenarios and in turn highlights the importance of ethical leadership both for its practical implications and theoretical contributions to organizational science.
### Tables

#### Table 1: Descriptive Statistics for Main Study Variables for the 2007 (Ethics) Dataset

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>M</th>
<th>SD</th>
<th>α</th>
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<td>-----</td>
<td>.15**</td>
<td>.15**</td>
<td>.11**</td>
<td>.08**</td>
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<td>.16**</td>
<td>.32**</td>
<td>.56</td>
<td>.50</td>
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<td>3.66</td>
<td>.15**</td>
<td>-.72**</td>
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<td>-.08**</td>
<td>-.17**</td>
<td>-.36**</td>
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<td>-.08**</td>
<td>.13**</td>
<td>.04</td>
<td>.19</td>
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<td>.06*</td>
<td>.11**</td>
<td>-.14**</td>
<td>-.01</td>
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</tbody>
</table>

Note, Results for weighted analyses (N = 1428) are presented above the diagonal, and results for unweighted analyses (N = 1467) are presented below the diagonal; α-reliabilities are common to both analyses and presented in the far right column; ** correlations significant at the .01 level, *correlations significant at the .05 level.

#### Table 2: 2007 (Ethics) Dataset (weighted) - Results from Multiple Regression Analyses: Influence of Rank (JrNCM) and Deployed on Ethical Leadership (H1, H2)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Ethical Leadership</th>
<th>Ethical Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.11*</td>
<td>.10*</td>
</tr>
<tr>
<td>Gender</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td>Tenure</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>Education</td>
<td>-.06*</td>
<td>-.06*</td>
</tr>
<tr>
<td>French Language</td>
<td>-.14***</td>
<td>-.14***</td>
</tr>
<tr>
<td>Marital Status</td>
<td>-.08**</td>
<td>-.08**</td>
</tr>
<tr>
<td>Hours worked/wk</td>
<td>.07*</td>
<td>.07*</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rank (JrNCM)</td>
<td>-.20**</td>
<td>-.13***</td>
</tr>
<tr>
<td>Deployed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.07</td>
<td>.06</td>
</tr>
<tr>
<td>Δ R²</td>
<td>.03</td>
<td>.02</td>
</tr>
<tr>
<td>F</td>
<td>11.99***</td>
<td>5.51**</td>
</tr>
<tr>
<td>N (listwise)</td>
<td>1353</td>
<td>1353</td>
</tr>
</tbody>
</table>

Standardized regression coefficients shown * p < .05, **p < .01, ***p < .001
Table 3: Hierarchical Multiple Regression Analyses Predicting Ratings of Supervisors’ Ethical Leadership From Deployed, Utilitarianism, and Formalism (H3, H4)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>ΔR²</th>
<th>B</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control variables a</td>
<td>.07***</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilitarianism</td>
<td>.02***</td>
<td>.07*</td>
<td>.08*</td>
</tr>
<tr>
<td>Formalism</td>
<td></td>
<td>.08</td>
<td>.04</td>
</tr>
<tr>
<td>Deployed</td>
<td></td>
<td>-.48</td>
<td>-.12</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Util x Deployed</td>
<td>.03***</td>
<td>-.83***</td>
<td>-.25***</td>
</tr>
<tr>
<td>Form x Deployed</td>
<td></td>
<td>.94**</td>
<td>.11**</td>
</tr>
<tr>
<td>Util x Form</td>
<td></td>
<td>.18**</td>
<td>.11**</td>
</tr>
<tr>
<td><strong>Step 4</strong></td>
<td></td>
<td>.003*</td>
<td></td>
</tr>
<tr>
<td>Util x Form x Deployed</td>
<td></td>
<td>-.89*</td>
<td>-.07*</td>
</tr>
<tr>
<td><strong>Total R²</strong></td>
<td>.12***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>1353</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*aControl variables included age, gender, tenure, education, French language, marital status, hours worked per week, and rank (JrNCM).

*p < .05. **p < .01. ***p < .001
Chapter Three: Organizational Climate, Career, and Culture: Upshots of Ethical Leadership from the Perspective of the Follower

Purpose

The role of ethics in determining employment outcomes is an underdeveloped area in the organizational sciences, particularly in the fields of industrial relations, human resources, psychology, and sociology (Budd, 2004). Ethical leadership theorizing itself is described as still being in the early stages of development (Yukl, 2010). Thus the extent to which ethical leadership represents effective leadership can be based on pragmatic or desirable workplace outcomes. The second study in this program of research seeks to better understand the role that ethical leadership plays in shaping key employment outcomes related to the organization’s climate, the satisfaction of its members, and the acceptance of nationally held beliefs that serve to both define Canadian culture in terms of its diversity and tolerance, as well as remain important to the maintenance of harmonious and synergic relationships in the workplace. The latter concept refers to Canada’s explicit policy of multiculturalism, in place since 1971, directing that all Canadians must be free to maintain and share their own cultural identities, free from discrimination and prejudice (Berry & Kalin, 1995).

Organizational climate is defined as shared perceptions of an organization’s policies and procedures that form a kind of undercurrent or atmosphere for those who experience it (Ostroff et al., 2003). The primacy of a healthy ethical climate is considered to be the backbone of the CF’s Defence Ethics Program (Jeffery, 2002). Because leaders are charged with the responsibility for cultivating and maintaining a healthy ethical climate, the role of ethical leadership is viewed as logically antecedent to the workplace outcomes of
organizational fairness climate, follower career satisfaction, and follower multicultural ideology and is argued to have temporal precedence in this study.

Since the origins of work climate theorizing, scholars have argued that there are many different types of work climates (Schneider, 1975). Some notable climate types in the literature include the climate for service (Schneider & Bowen, 1985), the climate for change (Schneider et al., 1996), the climate for success (Schneider et al., 1994), the climate for safety (Zohar, 2000), diversity climate (Cox, 1993), and the ethical work climate (Victor & Cullen, 1988). However, Ostroff et al. (2003) indicate that the ingredients responsible for creating, shaping or contributing to organizational climate – especially those related to the leader’s role in informing climate perceptions, have largely been unexplored in the literature especially as it relates to a leader’s role in shaping and informing climate perceptions. One particular organizational climate type – ethical climate, and more specifically a subset of ethical climate called organizational fairness climate, will be explored as an outcome of ethical leadership in this study.

Organizational research on the cross-cultural impact of ethical leadership (Resick et al., 2006; De Hoogh & Den Hartog, 2008) and the growing job satisfaction literature represent important areas of inquiry relevant to the modern workplace. Cox’s (1994) Interactional Model of Diversity on Individual Career Outcomes and Organizational Effectiveness, positions career satisfaction as an individual outcome of an organization’s diversity climate. The present study will adopt a slightly different approach and argue that career satisfaction is an outcome of ethical leadership and further, that ethical leadership drives perceptions of multicultural ideology. Multicultural ideology not only reflects a nationally held belief that serves to define Canadian culture but is also considered important
to the maintenance of harmonious and synergic relationships in the workplace. Thus, this study aims to demonstrate that ethical leadership relates positively to organizational fairness climate from the perspective of the follower, follower career satisfaction, and follower views of multicultural ideology.

**Organizational Culture, Climate, and Ethical Climate Theory**

The study of organizational culture and climate seek to explain how organizational members make sense of their environment and serve as the foundational elements used to describe organizational phenomenon (Schneider, 2000). Organizational climate is defined in the extant literature as the perception of formal and informal organizational policies, practices, and procedures (Reichers & Schneider, 1990). Ostroff et al. (2003) define organizational climate in terms of peoples’ own experiences as well as the experiences of their coworkers in an organizational context. While both climate and culture contain overlapping elements, they are distinguishable constructs that both seek to explain the shared psychological experiences of organizational members albeit from different scholarly traditions. Organizational climate theorizing historically preceded that of organizational culture whose roots are in anthropology. In terms of interpretative processes, Ostroff et al. (2003) describe climate as the “what” of organizational behaviour while culture represents the “why”. In other words, climate involves perceptions of what organizational members report happening to them whereas culture, the more stable construct, attempts to define why these perceptions occur and the latter can also be thought of as a more deeply embedded set of perceptions that are resistant to change (Schein, 2010). In this respect, climate is believed to emerge from the shared experiences of organizational members and leaders serve to cultivate and maintain the organizational climate – which is malleable.
The organizational climate type relevant to this study is the ethical work climate. Victor and Cullen (1988) describe ethical work climate in terms of the dominant perceptions around ethically charged organizational practices and procedures. Thus, a modification of the organizational climate definition above regards ethical climate as the perception of formal and informal organizational policies, practices and procedures that have ethical content (Victor & Cullen, 1988). Victor and Cullen’s ethical climate theory is derived from three classes of moral philosophy embedded in three loci of analyses (individual, local, and cosmopolitan). These ethical criteria are defined as: Egoism which is concerned with the maximization of self-interest; Benevolence, which is concerned with the maximization of joint-interests; and, Principle, which is concerned with the adherence to laws and rules. This multiple-component model was envisioned in response to concerns in the moral development literature that individual characteristics in isolation were insufficient to explain and predict moral and ethical behaviour, and that the concept of a “socio-moral atmosphere” (Kohlberg, 1984) would better address the impact of social factors on individual moral behaviour. Cullen et al. (2003) assert that the ethical climate of an organization is similar to any organizational value system because it will affect experiences of its members. The role that ethical leadership plays in shaping and cultivating an ethical climate is supported by the notion that leaders filter morally charged organizational policies and procedures for their followers which ultimately contributes to the development of shared climate perceptions (Kozlowski & Doherty, 1989). Pfeifer and Owens (2002) assert that the manner in which the organization and its leaders respond regarding the organization’s climate is germane to the acceptance of normatively appropriate behaviour by employees. Thus the practice of ethical leadership and the organization’s ethical climate are mutually reinforcing.
The Defence Ethics Program

A subset of ethical climate called organizational fairness climate was developed and validated by Kelloway et al. (1999) as part of the DND/CF’s Defence Ethics Program (DEP). To appropriately contextualize this measure, a brief description of the DEP explains the CF’s rationale for its interest in organizational climate. From a geopolitical perspective, the CF reached a point in its history in the early 1990’s, in response to a changing global environment, increasingly challenging United Nations peacekeeping missions, and the re-introduction of war-fighting missions, where it saw a need to formalize an ethics agenda into what it termed the DEP - a program whose goal it was to overtly implant ethical principles into the CF’s leadership and training doctrine.

The DEP is a top-down normative value-based program. A fundamental assumption of the program is that an ethical dimension is inherent in any decision that affects people. The heart of the DEP is the CF Statement of Defence Ethics. This is a set of core ethical principles and obligations that are considered to be the defining elements of today’s Canadian defence culture. Beauchamp (2002), described the role and mandate of the DEP as multi-dimensional since it serves to provide an ethical framework for the CF and DND; it is a promotion tool for individual awareness of the presence and importance of ethics; it commits itself to the continuous improvement of individual decision-making related to ethics in the context of the defence of the nation; and, it integrates a programmed approach to several processes that are required to fully implement ethics in an organization as complex as the CF. The foundation of the program is the three-part Statement of Defence Ethics. The Statement of Defence Ethics contains a declaration identifying who is bound by it and why; a hierarchical set of three ethical principles (Respect the dignity of all persons; Serve Canada
before self; and, Obey and support lawful authority) that refer to the universal ethical obligations owed to humanity, society, and lawful authority; and, a list of six core ethical obligations that are considered standards of conduct within the CF/DND. The six core ethical obligations and their definitions are:

1. Integrity - The requirement to give precedence to ethical values in decisions and actions.
2. Loyalty - Faithful commitment to something that has purpose, meaning and value.
3. Courage - Facing up to and dealing with anything that is difficult or dangerous instead of avoiding it.
4. Honesty - The ability to practice frankness, sincerity and openness in dealings with others.
5. Fairness - Treating others justly, equitably, and without bias.
6. Responsibility - The obligation to be accountable for decisions or actions.

Organizational fairness climate addresses the extent to which the CF and DND are fair in their dealings with personnel (Fraser, 2007). A 2003 Defence Ethics Survey conducted by the CF Department of Human Resources Research and Evaluation branch, found that the of all the ethical climate types validated by DND (Care, Self-interest, Supervisor Behaviour, Co-worker Behaviour, Organizational Rules, and Organizational Fairness), organizational fairness climate was the most important for DND to address. Therefore, because the fair treatment of others is both a core ethical obligation in the CF and is at the same time considered to be normatively appropriate leadership behaviour, and it is
leaders who are expected to influence their followers’ behaviour, it is predicted that ethical leadership will contribute positively to the organization’s socio-moral atmosphere and function as a key ingredient responsible for cultivating and maintaining the organization’s ethical climate.

**H5:** Ethical leadership is positively related to organizational fairness climate.

**Value-Percept Theory**

Sharf (2002) asserts that one of the pre-eminent factors influencing personal happiness is satisfaction with one’s career. In the present study, although both job and career satisfaction could be used interchangeably, the term career satisfaction is used in this research to reflect the fact that employment in the military profession is universally referred to as a career rather than a job due to the profession’s developmental nature, the length of expected employment, and the unlimited liability under which its members serve. It is for this reason that satisfaction with one’s work is considered by many scholars to be one of the most important and most studied phenomena in the social sciences. Locke (1976) describes this type of satisfaction as a positive emotional state derived from the assessment of one’s job.

There are three main categories of job satisfaction: situational, which posits that job satisfaction results from the nature of the work itself or the environment; dispositional, which posits that job satisfaction is based on the psychological make-up of the individual; and interactive which posits that job satisfaction results from both situation and person variables (Judge et al., 2001). Of the three categories of theory, the interactive comes closest to describing the mechanism through which career satisfaction in the present context manifests. Locke (1976) distils value-percept theory into the simple equation:

\[
Satisfaction = (Want – Have) \times Importance
\]
Locke asserts that dissatisfaction only occurs if there is a discrepancy between what is desired and received if the job (or in this case career) facet in question is considered important to the individual. In addition to Locke’s theory, social exchange theory (Blau, 1964) can also be useful in explaining satisfaction in this context through reciprocal relationships over the course of one’s career; specifically, the reciprocity by which consideration from the leader is exchanged for compliance in the follower ultimately leading to career satisfaction in the follower. It is therefore argued that consideration, as embodied in the ethical leadership concept where leaders listen to what followers have to say and have the best interests of their followers in mind (the third and ninth items in Brown et al.’s 2005 construct), positively influences perceptions of career satisfaction in respondents.

H6: Ethical leadership is positively related to followers’ career satisfaction.

Structural Integration Theory

Structural integration theory refers to the levels of heterogeneity in groups that comprise the formal structure of an organization (Cox, 1993). Heterogeneity in this context refers to the importance of proportional group size reflecting the ethnic makeup of the organization. Ridgeway (1991) asserted that when work groups are diverse, but the power structure is disproportionately concentrated in one group, it becomes difficult for members of the minority group to be perceived as leaders or potential leaders – either by themselves or by others. When combined with the concept of ethnocentrism, although groups can exhibit relative preferences towards others, individuals within these groups can vary in their degree of tolerance (Berry & Kalin, 1995). Thus, because Canada is widely regarded as one of the most diverse nations in the world, perceptions around ethnicity, diversity, and multiculturalism are particularly salient. In the present research context, a positive view of
multiculturalism it is argued is necessary to maintain organizational effectiveness through the reduction of inter-group conflict thereby fostering harmonious and synergetic relations among organizational members. It is therefore argued that one of the responsibilities of a leader is to cue or model such desired behaviours. Therefore, ethical leadership, through the social learning mechanism it is argued will imbue tolerance in followers particularly because tolerance is considered to be both normatively appropriate and a value that is important to North American culture. The latter assertion is consistent with the formulation of Brown et al.’s (2005) ethical leadership construct since ethical leaders set a positive example of how to do things right in terms of ethics (Brown et al.’s eighth item). Thus, individual views towards multicultural ideology will be influenced by followers’ perceptions of the ethical leadership of their supervisors.

H7: Ethical leadership is positively related to followers’ multicultural ideology.

Method

The dataset for this study is the 2005 (Diversity) CF Your-Say survey. The survey was conducted in a field setting with a non-experimental, cross-sectional design. It poses 74 questions dealing with life satisfaction, career management, work-life balance, supervision, turnover intention, perceptions about diversity, discrimination, and demographic information. The survey is divided into 16 different sections: Military Career, Work-Life Balance, Promoting the CF, Your Supervisor, Senior Leadership, DND/CF as a Whole, Career Management and Postings, Career Intentions, Life as a Whole, Life Satisfaction, Perceptions about Diversity, Diversity in Canada, Discrimination, Persons with Disabilities, Perceptions of Persons with Disabilities, and Background. The “focus” section of this survey dealt primarily with diversity and discrimination in the CF.
Participants and Procedures

This data is based on a random sample of N = 2,021 drawn from a sample frame of 47,537 with a response rate of 63.0% for the general sample. The final sample size, after data cleaning was N = 1,274. Missing values on key variables were assessed using the Missing Values Analysis module in SPSS 17. Missing values on key variables were imputed using the Expectation-Maximization (EM) algorithm once it was confirmed that these data were missing completely at random (MCAR). This allowed for subsequent analyses such as hierarchical multiple regression and Confirmatory Factory Analysis with other study variables to use listwise deletion as a conservative method for dealing with missing data because sample sizes are large.

This data can be uniquely stratified across a number of different demographic and workplace variables that also have generalizability outside of the military such as between labour, first-line supervision, middle management, and senior management in the private sector.

The sample composition was 87% male. The average age of respondents was 40.4 years with an average tenure of 19.5 years. Fifty-five percent of respondents reported educational attainment greater than high school. Thirty-one percent of respondents reported French as their first official language. The unweighted rank representation of this sample was: 27% JrNCM, 31% SrNCM, 20% JrO, and 22% SrO.

According to Goldenberg, (2006) participants came from two different samples: 1592 regular force members were randomly sampled and 429 ethnic minority respondents were deliberately over-sampled to obtain sufficient representation in low incidence groups. Both visible minorities (1162 persons in the CF) and Aboriginal people (1008 persons in the CF) were considered low incidence groups on 6 April 2005 (the time that the sample frames were drawn).
**Measures**

**Ethical leadership.** The methodology for the formulation of the 16-item ethical leadership scale was discussed in Chapter 2. Identically worded measurement items were selected and the same procedures were utilized to test the construct’s psychometric properties with this dataset. The ethical leadership measure utilizes a 5-point Likert-type scale (1 = strongly disagree, to 5 = strongly agree), prompting respondents to indicate their level of agreement or disagreement with statements related to the leadership behaviour of their immediate supervisor. One item from this 16-item measure is: “My supervisor makes decisions that are fair and unbiased”. The ethical leadership measure in the 2005 (Diversity) dataset displayed a high degree of internal consistency ($\alpha = .96$). Confirmatory Factor Analysis (CFA) using maximum likelihood estimation with AMOS 18 on this measure also supported the presence of a unidimensional construct that fit the data adequately ($\chi^2 = 1631.21, df = 104; p < .001; CFI = .92; RMSEA = .10; PNFI = .70; N = 1582$). The mean of ethical leadership was 3.70 ($SD = .74$).

**Rank.** Rank is an objective measure and is described in Chapter 2. It was used both as a dichotomous measure: junior ranks versus all others (who are more senior), and as a continuous measure with 14 categories (Private to General).

**Organizational fairness climate.** The organizational fairness climate scale is a subscale of the CF’s organizational ethical climate measure developed and validated by Kelloway et al. (1999) for DND. The organizational fairness climate measure in the 2005 (Diversity) and 2004 (Commitment) surveys was worded differently from the 2007 (Ethics) surveys. Correlating error terms yielded a better fit to the data ($\chi^2 = 1251.88, df = 88; p < .001; CFI = .94; RMSEA = .09; PNFI = .60; N = 1582$).
survey but the same construct domain was tapped in all three surveys. When tested with the present sample this measure displayed good internal reliability (\( \alpha = .75 \); and with the 2007 (Ethics) dataset \( \alpha = .93 \)). The 5-item measure utilizes a 7-point Likert-type scale (1 = strongly disagree, to 7 = strongly agree), prompting respondents to indicate their level of agreement or disagreement with statements related to the fairness climate of the organization. One item from this 5-item measure common to all three surveys is: “Organizational policies are equally fair to everyone”. The mean of organizational fairness climate was 2.66 (SD = .61).

**Career satisfaction.** The measure of career satisfaction was adapted from Warr et al.’s (1979) Global Job Satisfaction scale. Warr et al.’s original measure is a 15-item assessment of an individual’s overall job satisfaction based on both intrinsic and extrinsic factors. The scale reliability of this measure ranged from \( \alpha = .80 \) to \( \alpha = .91 \) (Fields, 2002). Warr et al.’s measure has been used by researchers in the assessment of global job satisfaction to separate subjects into satisfied and dissatisfied employees (Winefield et al., 1991). The present study utilizes a 13-item adaptation of this scale used in CF Your-Say surveys since 2005. The construct of career satisfaction in the present survey is identical to the measure used in the 2007 (Ethics) survey. Individuals are asked to indicate their level of satisfaction with various aspects of their military career. Responses are obtained on a 7-point Likert-type scale (1 = completely dissatisfied, to 7 = completely satisfied). One item from this measure is “How satisfied or dissatisfied are you with opportunities for professional development?” Reliability analysis on the present sample produced \( \alpha = .90 \) (\( \alpha = .91 \) in the 2007 (Ethics) dataset) indicating a high level of internal consistency. Career satisfaction is
posited as an outcome of ethical leadership and is measured in all three surveys. The mean of career satisfaction was 4.78 ($SD = 1.00$).

**Multicultural ideology.** The multicultural ideology scale is based on Berry and Kalin (1995). This 8-item measure utilizes a 7-point Likert-type scale (1=strongly disagree to 7 = strongly agree) prompting respondents indicate their level of agreement with statements that assess support for having a culturally diverse society in Canada. One item from this scale is “A society that has a variety of ethnic and cultural groups is more able to tackle new problems as they occur”. The scale displayed good internal reliability when tested with the present sample ($\alpha = .82$). The mean of multicultural ideology was 4.53 ($SD = 1.01$).

**Controls.** Age, gender, tenure, education, French language, marital status and hours worked, were controlled in this study. The rationale for controlling these variables was discussed in Chapter 2. The L1-organization was also controlled in the present study as well as in the final study (Chapter 4) to reflect the fact that the datasets used for these studies were not weighted.

**Analytic Strategy**

In the first step of the analyses in the present study, the central variable of interest – ethical leadership, was correlated with objective measures such as followers’ rank, and perceptive measures indicating their ratings of the organization’s fairness climate, career satisfaction, and views towards multicultural ideology. To establish whether statistically significant relationships exist between the variables above and to describe the strength and direction of such effects, Pearson product-moment correlation analysis, partial correlation (accounting for the control variables), and ordinary least squares regression analyses were performed.
The next step of the analyses utilized hierarchical regression to apportion the unique variance attributed to statically significant variables.

**Results**

Table 4 contains correlations, descriptive statistics, and reliabilities for the measured variables.

**Correlation and multiple regression.** Hypothesis 5 predicted that there would be a positive relationship between followers’ perceptions of their leaders’ ethical leadership and their own ratings of the organization’s fairness climate. The relationship between ethical leadership and organizational fairness climate was tested using Pearson product-moment correlation and hierarchical regression accounting for the control variables (age, gender, tenure, level of education, first official language, marital status, hours worked per week, and L1-Organization) (see Table 5). Results of the correlation analysis indicated that there was a medium-sized, positive correlation between ethical leadership and organizational fairness climate \( r = .38, n = 1274, p < .01 \). Utilizing a two-step hierarchical multiple regression model with controls entered in the first step and ethical leadership in the second step indicated the presence of a significant main effect \( \beta = .38, p < .001 \). The total variance explained by this model was 16% \( F(9, 1304) = 28.16, p < .001 \). These findings indicate that as followers’ ratings of the ethical leadership of their supervisor increased, so too did their perception of organization’s fairness climate. These findings support Hypothesis 5.

Hypothesis 6 predicted that there would be a positive relationship between followers’ perceptions of their leaders’ ethical leadership and their ratings of their own career satisfaction. Results of the correlation analysis indicated that there was a large-sized positive
correlation between ethical leadership and career satisfaction ($r = .56, n = 1274, p < .01$).

Under the two-step hierarchical regression framework described above, controls were entered at step 1 followed by ethical leadership at step 2 indicating the presence of a statistically significant main effect ($\beta = .56, p < .001$). The total variance explained by this model was 34% $F(9, 1455) = 81.45, p < .001$. These results indicated that as ratings of ethical leadership increased, respondents’ own career satisfaction also increased. These results support Hypothesis 6.

Finally, Hypothesis 7 predicted that perceptions of ethical leadership would be positively related to followers’ own views towards multicultural ideology. Results of the correlation analysis indicated that there was a small-sized positive correlation between ethical leadership and multicultural ideology ($r = .12, n = 1274, p < .01$). Under the two-step hierarchical regression framework also described above, controls were entered at step 1 and ethical leadership was entered at step 2. The presence of a significant main effect ($\beta = .12, p < .001$) indicated that as ratings of ethical leadership increased, so too did followers’ ratings of their own multicultural ideology. The total variance explained by this model was 4% $F(9, 1428) = 7.38, p < .001$ (see Table 5). These results support Hypothesis 7.

**Discussion**

In order to ascertain the extent to which ethical leadership is considered a pragmatic concept, a single yet important research question was asked and answered in this study: Is ethical leadership related to desirable workplace outcomes? The workplace outcomes tested in this study were: the organization’s fairness climate, followers’ career satisfaction, and followers’ perceptions of multicultural ideology. In each case, ethical leadership was treated as having temporal precedence with the outcomes tested.
Hypothesis 5 supported the prediction that follower perceptions of ethical leadership were positively related to the organization’s fairness climate. This finding supports ethical climate theory. Perceptions of formal and informal organizational policies, practices, and procedures that contributed to what Kohlberg (1984) referred to as the organization’s “socio-moral atmosphere” were assessed with a climate construct that demonstrated excellent internal reliability. Ethical leadership as practiced by supervisors, served as a mechanism through which leaders functioned as interpretive filters of organizational policies and practices and helped contribute to a common or shared view of the organization’s ethical climate (Ostroff et al., 2003). Organizational fairness climate was perceived higher, the more favourably followers rated the ethical leadership of their supervisors thereby reinforcing conceptual work in both leadership and ethical theory that suggests that a leader’s moral development – in this case exemplified by the leader’s higher rank, can affect the organization’s ethical climate (Schminke et al., 2005). A practical implication this finding consistent with Schminke et al. (2005) who also argued that the potential impact of the leader on his/her followers is magnified in a strong ethical climate, is that leaders can be more effective in the leadership task when the employment relationship is supported by a positive organizational socio-moral atmosphere. Another practical implication of this finding stems from the fact that ethical climate has been found to be a significant predictor of ethical behaviour in organizations (Desphande, 1996; Bartels et al., 1998). Therefore ethical climate and ethical leadership can be viewed as mutually reinforcing concepts each having the power to shape follower behaviours in a desirable manner.

Hypothesis 6 supported the prediction that ethical leadership was positively related to follower career satisfaction. Support was found for value-percept theory through the
assessment of respondents’ career satisfaction with a measure that also demonstrated excellent internal reliability. Respondents’ own implicit internal reckoning of Locke’s (1976) formulation of job satisfaction extended into the career domain was the mechanism it is argued, through which ethical leadership functioned to enhance subordinate perceptions of their own career satisfaction. Specifically, followers’ assessments regarding their quality of life in the organization, career management, career progression, recognition from both the supervisor and the organization, and opportunities for professional development - all facets of the career satisfaction measure, were in aggregate strongly influenced by the ethical leadership of their supervisor. The latter finding can be explained in part due to the leader’s care and concern for subordinates that resulted from two-way communication inherent in the ethical leadership construct. Career satisfaction was perceived higher, the higher respondents rated the ethical leadership of their supervisor. This finding provides empirical evidence to support Brown and Treviño’s (2006) proposition that ethical leadership is positively related to follower satisfaction and is consistent with Toor and Ofori (2009) who also established that satisfaction (using a 2-item satisfaction scale, \( \alpha = .79 \), from the 45-item Multi-factor Leadership Questionnaire) was strongly related to ethical leadership \( (r = .56, p < .01) \). Brown et al.’s (2005) original study only looked at satisfaction with the supervisor and produced a small effect. The larger effect size in the present study \( (r = .56, p < .01) \) compared to Brown et al. (2005) can be reconciled through differences in the satisfaction measure. Brown et al. utilized a 4-item measure of general satisfaction with the supervisor \( (\alpha = .85) \) finding satisfaction to be weakly correlated with ethical leadership \( (r = .22, p < .01) \). The present study utilized a 13-item measure tapping satisfaction with specific facets of one’s career \( (\alpha = .90) \). The practical significance of this finding is that ethical leadership, unlike other values-
based leadership approaches that may share this conceptual space, such as servant leadership (Greenleaf, 1977) and spiritual leadership (Fry, 2003) has been shown to be associated with concrete and pragmatic impacts on followers. In this case, according to Super (1953), greater satisfaction with one’s career manifests in greater personal happiness which can spill over into other aspects of the follower’s life – both in and outside of the workplace suggesting that ethical leadership can function as a linking mechanism between these two domains.

Hypothesis 7 supported the prediction that ethical leadership was positively related to multicultural ideology. Ethical leadership as practised by supervisors through the social learning mechanism modeled the necessary normatively appropriate conduct to followers that imbued tolerance towards different cultures and ethnicities contributing to positive views of multicultural ideology. Respondents’ positive views of multicultural ideology assessed with a valid measure with high internal reliability were higher, the higher the rating of ethical leadership of their supervisor. This latter finding extends ethical leadership theory and structural integration theory through the incorporation of previously untested concepts. The practical importance of this finding is related to the maintenance of organizational effectiveness through reducing the potential for inter-group conflict – thereby increasing the likelihood of harmonious and synergistic workplace relationships. When combined with the notion that ethical leadership is universally supported across cultures (Resick et al., 2006), the latter also has the potential to extend beyond the boundaries of an organization situated within pluralistic society. This finding further underscores the complexity and variety of mechanisms at play when normatively appropriate conduct is modeled to followers. Thus when considered in aggregate, empirical evidence as supported by these latter three
hypotheses demonstrates that ethical leadership is positively related to desirable workplace outcomes and these outcomes serve a pragmatic purpose for the employment relationship.
### Tables

**Table 4: Descriptive Statistics of Main Study Variables for the 2005 (Diversity) Dataset (unweighted)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ethical Leadership</td>
<td>3.70</td>
<td>.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Rank JrNCM (dummy)</td>
<td>.27</td>
<td>.46</td>
<td>-.16**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Rank (continuous)</td>
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<td>3.72</td>
<td>.17**</td>
<td>-.72**</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Organizational Fairness Climate</td>
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<td>.38**</td>
<td>-.15**</td>
<td>.17**</td>
<td>.75</td>
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<tr>
<td>5 Career Satisfaction</td>
<td>4.78</td>
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<td>.56**</td>
<td>-.17**</td>
<td>.13**</td>
<td>.60**</td>
<td>.90</td>
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</tr>
<tr>
<td>6 Multicultural Ideology</td>
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<td>.12**</td>
<td>-.06*</td>
<td>.11**</td>
<td>.23**</td>
<td>.19**</td>
<td>.82</td>
</tr>
</tbody>
</table>

* N = 1274  ** correlations significant at the .01 level, *correlations significant at the .05 level; α’s for scale measures on diagonal in bold

**Table 5: 2005 (Diversity) Dataset - Results from Multiple Regression Analyses: Influence of Ethical Leadership on Organizational Fairness Climate, Career Satisfaction, and Multicultural Ideology (H5, H6, H7)**

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Organizational Fairness Climate</th>
<th>Career Satisfaction</th>
<th>Multicultural Ideology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
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<td></td>
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</tr>
<tr>
<td>Age</td>
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<td>-.01</td>
<td>-.03</td>
</tr>
<tr>
<td>Gender</td>
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<td>-.07*</td>
</tr>
<tr>
<td>Tenure</td>
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<td>0</td>
</tr>
<tr>
<td>Education</td>
<td>.07*</td>
<td>.01</td>
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<tr>
<td>French Language</td>
<td>.04</td>
<td>0</td>
<td>-.10**</td>
</tr>
<tr>
<td>Marital Status</td>
<td>-.02</td>
<td>0</td>
<td>.01</td>
</tr>
<tr>
<td>Hours worked/wk</td>
<td>-.10**</td>
<td>-.12***</td>
<td>.05†</td>
</tr>
<tr>
<td>L1-Organization</td>
<td>-.01</td>
<td>.03</td>
<td>.03</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical Leadership</td>
<td>.38***</td>
<td>.56***</td>
<td>.12***</td>
</tr>
</tbody>
</table>

**R^2**  .16  .34  .04

**Δ R^2**  .15  .31  .02

**F**  28.16***  81.45***  7.38***

* N (listwise)  1314  1465  1438

Standardized regression coefficients shown  † p < .1, * p < .05, **p < .01, ***p < .001
Chapter Four: Rank and the Mediating Role of Ethical Leadership on its Consequences from the Perspective of the Follower

Purpose

The third and final study in this program of research seeks to better understand the role that ethical leadership plays in shaping employment outcomes such as organizational fairness climate, follower career satisfaction, and follower affective commitment. This study also functions to replicate previous findings involving organizational fairness climate and career satisfaction with a different dataset and extends the analytical framework introduced in Chapter 1 by positioning follower affective commitment as an additional important outcome of ethical leadership. The study also aims to demonstrate that with the inclusion of rank as an antecedent variable, ethical leadership functions as a partial mediator transmitting the effects of follower rank onto organizational fairness climate, follower career satisfaction, and follower affective commitment thereby positing a full model of ethical leadership that can be tested with either regression analysis or structural equation modeling techniques. The use of ethical leadership as a mediator helps to inform both how and why these relationships occur.

The Organizational Commitment Model

Meyer and Allen (1997) posit that a generally accepted notion of what constitutes a committed employee is an employee who is loyal to the organization throughout the economic cycle, one who works hard, protects company assets, maintains regular attendance, and one who aligns himself/herself with the company’s goals and mission. Utilizing this notion, organizational commitment can also be viewed as a psychological state that describes the employee’s relationship with the organization. Organizational commitment is a useful construct in the context of management research because the strength of an employee’s commitment to an organization is related to several outcome variables in the extant literature.
such as turnover and turnover intention, performance, absenteeism, tardiness, and 
organizational citizenship behaviour (Meyer et al., 2008). Organizational commitment is 
also used in the CF as a component of the CF’s Retention Model. Otis and Straver (2008) 
suggest that one’s decision to remain in the CF is a result of a greater sense of attachment and 
loyalty rather than overall satisfaction with one’s career.

Meyer and Allen (1997) conceived, tested, and substantiated a three-component 
model of organizational commitment rooted in social exchange theory (Blau, 1964) that 
tapped an employee’s obligation to remain with the organization called normative 
commitment; reflected an employee’s understanding of the perceived cost of leaving called 
continuance commitment; and tapped an employee’s feelings of psychological attachment to, 
involvement with, and identification with an organization called affective commitment. The 
latter, according to March and Simon (1958) is considered a higher order commitment 
particularly because of its imbedded affective component and its ability to increase 
motivation towards employee productivity. Of the three dimensions of commitment, meta- 
analyses in the extant literature have shown affective commitment to consistently produce the 
highest reliability (average N-weighted reliability = .82) and the strongest correlation with 
ethical leadership’s “closest cousin” - transformational leadership (weighted average 
corrected correlation with transformational leadership: $\rho = .46$) and relevant workplace 
outcome variables such as employee well-being, job satisfaction, and positive affect (Meyer 
et al., 2002). Although ethical leadership and transformational leadership have been shown 
to be distinct constructs (Brown et al., 2005), the overlap contained in the idealized influence 
dimension of transformational leadership, because it is also concerned with role modeling 
and also contains an ethical element, informs the conjecture that ethical leadership and
affective commitment will also be similarly related – the testing of this relationship is one of the aims of this study.

According to Meyer and Allen (1997), research suggests that the psychological mechanism through which affective commitment develops is personal fulfillment. Personal fulfillment is known to be a necessary building block of one’s self-concept - which refers to how individuals view themselves in their particular situation (Super, 1953). Super (1953) asserts that one’s career development itself is the process of developing and implementing one’s self-concept. Thus, ethical leadership will influence work that employees find fulfilling through supportive supervision that is fair and recognizes employee contributions thereby facilitating personal fulfillment and contributing to employees’ self-concept.

**H8: Ethical leadership is positively related to followers’ affective commitment.**

**Ethical Leadership as a Mediating Mechanism**

Thus far, in this program of research, ethical leadership has been shown to be both an outcome variable (Chapter 2) and an antecedent variable (Chapter 3). However the question of whether ethical leadership contributes to desirable workplace outcomes through the transmission of indirect effects has rarely been tested in the extant literature; known examples include: Walumbwa and Schaubroeck (2009) who established that the leader personality traits of agreeableness and conscientiousness were indirectly related to follower voice behaviour through the mediating influence of ethical leadership; and, Piccolo et al. (2010) who established that ethical leadership mediated the effect of task significance and effort on followers’ job performance. In the present study, the use of followers’ rank in predicting individual affective commitment, perceptions of the organizational fairness
climate, and individuals’ own career satisfaction through the mediating influence of ethical leadership it is argued, will shed new light on the extent to which ethical leadership functions as a means for one’s level in an organization (which was argued to function a correlate for training in Chapter 2) to exert influence on the aforementioned workplace outcomes. The latter assertion is made because ethical leadership by definition incorporates the elements of involvement, fairness, and consideration throughout the process of role modeling. It is therefore likely that ethical leadership mediates the influence of followers’ rank on their affective commitment, organizational fairness climate, and career satisfaction. However, because it is plausible that the influence of rank on these outcomes may also be transmitted through other related mediators such as the Leader-Member Exchange relationship (Graen & Uhl-Bien, 1995), or even other leadership constructs that also theoretically role-model normatively appropriate behaviours such as transformational leadership (Turner et al., 2002) and servant leadership (Walumbwa et al., 2010), a partial rather than a complete mediation is proposed. Thus, utilizing followers’ affective commitment, and building on the findings from Chapter 3, the following hypotheses were tested:

\[ H9: \text{Ethical leadership partially mediates the relationship between follower rank (continuous) and follower affective commitment}. \]

\[ H10: \text{Ethical leadership partially mediates the relationship between follower rank (continuous) and organizational fairness climate}. \]

\[ H11: \text{Ethical leadership partially mediates the relationship between follower rank (continuous) and follower career satisfaction}. \]
Method

The dataset used to test the hypotheses is the 2004 (Commitment) CF Your-Say survey. The survey was conducted in a field setting with a non-experimental, cross-sectional design. It poses 42 questions dealing with life satisfaction, career management, work-life balance, supervision, housing, commitment, and demographic information. The survey is divided into 15 different sections: Military Life, Life as a Whole, Work-Life Balance, Work Load/Time Away, Your Supervisor, DND/CF as a Whole, Commitment, Career Intentions, Accommodations, Quality of Life, General-Family/Singles, Dual Service Couples, Future Outlook, Programs and Services and Background. The “focus” section of this survey deals primarily with organizational commitment in the CF.

Participants and Procedures

Unlike the 2007 and 2005 Your-Say surveys, precise information regarding the sample frame was not made available by DND. The sampling methodology (stratified random sample) was identical to the 2007 and 2005 surveys. The response rate for the sample was 44.7% indicating that 2,832 CF members were surveyed (Norton, 2005). The final sample size after data cleaning was N = 1,266. Missing values on key variables were assessed using the Missing Values Analysis module in SPSS 17. Missing values on key variables were imputed using the Expectation-Maximization (EM) algorithm once it was confirmed that these data were missing completely at random (MCAR). This allowed for subsequent analyses such as mediation testing with OLS regression and Confirmatory Factory Analysis with other study variables to use listwise deletion as a conservative method for dealing with missing data because sample sizes are large.
This data can be uniquely stratified across a number of different demographic and workplace variables that also have generalizability outside of the military such as between labour, first-line supervision, middle management, and senior management in the private sector.

Characteristics of this sample were: 89% male; the average age of respondents was 39.9 years; average tenure was 18.9 years; 58% of respondents reported educational attainment greater than high school; and, 27% of respondents reported French as their first official language. The unweighted rank representation of this sample was: 26% JrNCM, 30% SrNCM, 21% JrO, and 23% SrO.

Measures

**Ethical leadership.** The methodology for the formulation of the 16-item ethical leadership scale was discussed in Chapter 2. Identically worded items were selected and the same procedures were utilized to test the construct’s psychometric properties with this dataset. The ethical leadership measure utilizes a 5-point Likert-type scale (1 = strongly disagree, to 5 = strongly agree), prompting respondents to indicate their level of agreement or disagreement with statements related to the leadership behaviour of their immediate supervisor. One item from this 16-item measure is: “My supervisor makes decisions that are fair and unbiased”. The ethical leadership measure in the 2004 (Commitment) dataset displayed a high degree of internal consistency (α = .95). Confirmatory Factor Analysis (CFA) using maximum likelihood estimation with AMOS 18 on this measure also supported the presence of a unidimensional construct that fit the data adequately ($\chi^2 = 1507.72, df =$
The mean of ethical leadership was 3.76 ($SD = .74$).

**Rank.** Rank is an objective measure and is described in Chapter 2. It was used both as a dichotomous measure: junior ranks versus all others (who are more senior), and as a continuous measure with 14 categories (Private to General) to allow for the testing of mediation/partial mediation and the transmission of indirect effects.

**Organizational fairness climate.** The organizational fairness climate measure in the 2004 (Commitment) survey was worded identically to the 2005 (Diversity) survey. Although the wording of the construct in the latter two surveys differs from that contained in the in the 2007 (Ethics) survey, the same construct domain was tapped in all three surveys. When tested with the present sample, this measure displayed good internal reliability ($\alpha = .74$). The 5-item measure utilizes a 7-point Likert-type scale (1 = strongly disagree, to 7 = strongly agree), prompting respondents to indicate their level of agreement or disagreement with statements related to the fairness climate of the organization. One item from this 5-item measure common to all three surveys is: “Organizational policies are equally fair to everyone”. The mean of organizational fairness climate was 3.19 ($SD = .72$).

**Career satisfaction.** Career satisfaction was only available as a single-item measure in the 2004 (Commitment) survey. Respondents were asked: “How satisfied are you with the military way of life?” on a 7-point Likert-type scale (1 = completely dissatisfied to 7 = completely satisfied). The mean of career satisfaction was 5.28 ($SD = 1.27$).

**Affective commitment.** The affective commitment scale is based on Meyer and Allen (1997). Coefficient alpha values range from $\alpha = .77$ to $\alpha = .88$ in the extant literature.

---

13 Correlating error terms yielded a good fit to the data ($\chi^2 = 840.31, df = 88; p < .001; CFI = .95; RMSEA = .08; PNFI = .61; N = 1341$).
(Fields, 2002). This 6-item measure utilizes a 5-point Likert-type scale (1=strongly disagree to 7 = strongly agree) prompting respondents indicate their level of agreement with statements that assess their emotional attachment to, identification with, and involvement in the organization. One item from this scale is “I would be very happy to spend the rest of my career with the Canadian Forces”. The scale displayed good internal reliability when tested with the present sample ($\alpha = .80$). The mean of affective commitment was 3.40 ($SD = .72$).

**Controls.** Age, gender, tenure, education, French language, marital status, hours worked, and L1-organization were controlled in this study.

**Analytic Strategy**

In the first step of the analyses to this final study, the central variable of interest – followers’ perceptions of their immediate supervisor’s ethical leadership, was correlated with objective measures indicating the followers’ rank and perceptive measures indicating followers’ ratings of the organization’s fairness climate, their own career satisfaction, and ratings of their affective commitment towards the organization. To establish whether statistically significant relationships exist between the variables above and to describe the strength and direction of such effects, Pearson product-moment correlation analysis, partial correlation (accounting for the control variables), and ordinary least squares regression analyses were performed.

The next step in the analyses utilized ordinary least squares regression to test for the transmission of indirect effects. Three strategies were utilized to test for mediated effects: the Causal Steps Approach (Baron & Kenny, 1986), the Distribution of Coefficients Approach (Sobel, 1982; 1986), and the Bootstrapping Approach (Preacher & Hayes, 2008).
The Causal Steps approach, despite its intuitive appeal is increasingly being criticized in the Organizational Behaviour literature for its inability to test the statistical significance of the mediated effect and for its low statistical power (Van Dijke et al., 2010) yet still remains one of the most popular and most cited mediation tests in all of the organizational sciences. The three equations of the Causal Steps Approach, incorporating a common set of coefficient labels that will be used in subsequent analyses are discussed below.

According to MacKinnon (2008), the presence of a mediated effect can be established utilizing the following three regression equations:

\[
Y = i_1 + cX + e_1
\]
\[
M = i_2 + aX + e_2
\]
\[
Y = i_3 + \frac{c}{X}X + bM + e_3
\]

where, \(Y\) is the dependent variable, \(X\) is the independent variable; \(M\) is the mediator; \(c\) denotes the relationship between the independent variable to the dependent variable (also called the total effect); \(a\) is the parameter relating the independent variable to the mediator; \(c'\) is the parameter relating the independent variable to the dependent variable adjusted for the effects of the mediator (also called the direct effect); \(b\) is the parameter relating the independent variable to the mediating variable; \(e_1, e_2,\) and, \(e_3\) are error terms; and, \(i_1, i_2,\) and \(i_3\) represent the intercept terms. Utilizing this methodology, \(c - c'\) is equivalent to \(ab\), both representing an equivalent estimate of the mediated effect (also called the indirect effect).

A more rigorous test of the mediated effect is called the Distribution of Coefficients, or Sobel’s Test (Sobel, 1982; 1986) and is a formal statistical significance test to determine whether the indirect effect transmitted through a mediator is trivial or not. The test compares the strength of the indirect effect of the antecedent variable on the outcome variable to the
null hypothesis that it equals zero. This is accomplished by estimating whether the products of the latter unstandardized regression coefficients (parameters $a$ and $b$, described above) are significantly different from zero. The Sobel’s test equation is:

$$z\text{-value} = \frac{a \cdot b}{\sqrt{(b^2 \cdot s_a^2 + a^2 \cdot s_b^2)}}$$

where, $s_a$ and $s_b$ represent the standard errors of the parameter terms.

However, the Distribution of Coefficients approach also contains limitations – it assumes that the product of the relevant regression coefficients is normally distributed and it is also based on a large sample size. Thus an even more rigorous methodology for assessing the presence and strength of the indirect effect is based on an asymptotic re-sampling strategy - also known as Bootstrapping. The Bootstrapping approach (Preacher & Hayes, 2008) is currently the most rigorous test of a mediated effect. By bootstrapping the sampling distribution of the relationship between the antecedent and the mediator ($a$) as well as the mediator and outcome ($b$), confidence intervals can be empirically derived from the bootstrapped sampling distribution. The latter is accomplished with multiple regression analyses by generating a sampling distribution of the product term ($ab$) of the unstandardized regression coefficients by randomly sampling cases from the original sample (with replacement), computing the product term, and repeating the process several hundred or several thousand times. In the present study this procedure is repeated 1,000 times utilizing a Bootstrapping algorithm in SPSS 18 – ultimately resulting in bias-corrected bootstrapped intervals. Bootstrapping is considered to be the superior approach because it makes no assumptions about the shape of the distribution; does not impose the assumptions of normality; and produces a test that is not dependent on large sample theory. In the present study all three approaches were utilized.
Results

Table 6 contains correlations, descriptive statistics, and reliabilities for the measured variables.

**Correlation and multiple regression.** Hypothesis 8 predicted that follower ratings of their immediate supervisor’s ethical leadership would be positively associated with their own affective commitment to the organization. The relationship between ethical leadership and affective commitment was tested using Pearson product-moment correlation and hierarchical regression accounting for the control variables (age, gender, tenure, level of education, first official language, marital status, hours worked per week, and L1-Organization) (see Table 7). Results of the correlation analysis indicated that there was a small-sized, positive correlation between ethical leadership and followers’ affective commitment ($r = .26, n = 1266, p < .01$). Next, a two-step hierarchical regression model with controls added in step 1 and ethical leadership added in step 2 was utilized. The presence of a significant main effect at step 2 ($\beta = .25, p < .001$) indicated that as followers’ ratings of ethical leadership increased so too did their level of affective commitment. The total variance explained by this model was 8\% $F(9, 1208) = 11.87, p < .01$ (see Table 7). These results support Hypothesis 8.

**Mediation tests.** Hypotheses 9, 10, and 11 each predicted that ethical leadership would partially mediate the effect of followers’ rank on: ratings of their affective commitment (Hypothesis 9), organizational fairness climate (Hypothesis 10), and, ratings of their own career satisfaction (Hypothesis 11). Hypotheses 9, 10, and 11 were tested utilizing Causal Steps (Baron & Kenny, 1986), Distribution of Coefficients (Sobel, 1982; 1986), and the Bootstrapping approaches (Preacher & Hayes, 2008) (see Tables 8, 9, and 10). In all three
hypotheses support was found for ethical leadership partially mediating the effect of follower rank on each of the outcome variables tested. Specifically, in Hypothesis 9, support was found for ethical leadership partially mediating the effect of follower rank on affective commitment. In Table 8, coefficient $c'$ decreased from $\beta = 0.025$ to $\beta = 0.018$ ($\beta$ represents the unstandardized regression coefficient and is used to avoid confusion with the mediator to outcome parameter symbol, $b$) with the inclusion of the mediator, ethical leadership, in the third regression. A Sobel’s test confirmed the presence of a statistically significant indirect effect (Sobel’s test statistic = 3.67, $p < .001$), and the bootstrapped confidence interval did not include a zero value (CI = 0.004 to 0.012). In this case, ethical leadership explained 29% of the total effect of follower rank on followers’ affective commitment.\(^{14}\)

Similarly in Hypothesis 10, support was found for ethical leadership partially mediating the effect of follower rank on organizational fairness climate. In Table 9, coefficient $c'$ decreased from $\beta = 0.053$ to $\beta = 0.044$ with the inclusion of the mediator, ethical leadership, in the third regression. A Sobel’s test confirmed the presence of a statistically significant indirect effect (Sobel’s test statistic = 4.21, $p < .001$), and the bootstrapped confidence interval did not include a zero value (CI = 0.005 to 0.014). In this case, ethical leadership explained 16% of the total effect of follower rank on organizational fairness climate.

Finally, in Hypothesis 11, support was found for ethical leadership partially mediating the effect of follower rank on followers’ career satisfaction. In Table 10, coefficient $c'$ decreased from $\beta = 0.046$ to $\beta = 0.029$ with the inclusion of the mediator, ethical leadership, in the third regression. A Sobel’s test confirmed the presence of a statistically significant indirect effect (Sobel’s test statistic = 4.68, $p < .001$), and the bootstrapped confidence interval did not include a zero value (CI = 0.006 to 0.016). In this case, ethical leadership explained 16% of the total effect of follower rank on followers’ career satisfaction.

\(^{14}\) The proportion of the total effect that is mediated is calculated by: $ab/c$ or, equivalently $1-(c'/c)$.
ethical leadership, in the third regression. A Sobel’s test confirmed the presence of a statistically significant indirect effect (Sobel’s test statistic = 4.40, \( p < .001 \)), and the bootstrapped confidence interval did not include a zero value (CI = .010 to .027). In this case, ethical leadership explained 37% of the total effect of follower rank on followers’ career satisfaction.

**Discussion**

Hypothesis 8 supported the prediction that the ethical leadership of the immediate supervisor, as rated by the follower, would be positively related to followers’ own ratings of affective commitment. Support was found for Meyer and Allen’s (1997) model of organizational commitment – specifically the component of affective commitment. Utilizing the mechanism described in Meyer and Allen’s model, it is suggested that ethical leadership as a mechanism itself, contributed to enhance the process of personal fulfillment in respondents through supportive and fair supervision engendering feelings of attachment, involvement, and identification with the organization. Specifically, affective commitment was rated higher, the higher respondents rated the ethical leadership of their supervisors. This finding also provides empirical evidence to support Brown and Treviño’s (2006) proposition that ethical leadership is positively related to organizational commitment. A practical implication of this finding is that ethical leadership can be used as a tool to enhance retention in the CF to underpin Otis and Straver’s (2008) notion that one’s decision to remain in the CF is a result of a greater sense of attachment and loyalty (both of which were tapped by the affective commitment measure) while at the same time increasing the career satisfaction of its members. A further test of the extent to which ethical leadership contributes to the
affective commitment of followers is exemplified by its ability to function as a mediating variable and is discussed in the next series of hypotheses.

The support of Hypotheses 9, 10, and 11 addressed the final research question in this program of research: Does ethical leadership contribute to desirable workplace outcomes through the transmission of indirect effects? Ethical leadership was demonstrated to function as a partial mediator, transmitting the indirect effect of follower rank/status onto desirable workplace outcome variables such as follower affective commitment, organizational fairness climate, and follower career satisfaction showing that ethical leadership functions as a means for rank to exert its influence on these outcome variables through the mediating effect of ethical leadership. Because statistically significant partial mediation effects were supported, these results also help to explain both how and why the relationship between rank and its outcomes exist. In the literature on job satisfaction for example, prior to this research, Oshagbemi (1997) established that rank was positively associated with job satisfaction however the mechanism through which this effect occurred was not explored. In the present case, it can now be asserted that rank is positively associated with career satisfaction partially because of the influence ethical leadership.

It is important to qualify the magnitude of actual effect sizes observed for the indirect effects, given that these effects were small. Although these effects were relatively small, and the $R^2$ values suggest that only a small percentage of variance explained in the dependent variable is explained by the mediated effect, such effects are common in the literature because mediated effects are in fact products of coefficients and hence smaller than the individual coefficients themselves (MacKinnon, 2008). Further, the extant literature also suggests that even small effects are important (Abelson, 1985; Rosnow & Rosenthal, 1989).
This result is also consistent with the magnitude of indirect effects supported in ethical leadership’s mediation of personality traits with employee voice behaviour (Walumbwa & Schaubroeck, 2009).

A practical implication of the mediation findings above serve to refute any notion that one’s hierarchical level alone accounts for one’s attachment to the organization, one’s assessment of the organization’s fairness practices, or satisfaction with one’s career. Results of the mediation tests show that one’s level in the organization is only partially responsible for these latter outcomes. Roughly one third of the effect on the aforementioned desirable workplace outcomes was directly attributable to the presence of ethical leadership. Applied to the broader employment relationship, it is argued that ethical leadership can serve as a key mechanism through which Budd’s (2004) notion of efficiency, equity, and voice can be achieved.
Tables

Table 6: Descriptive Statistics of Main Study Variables for the 2004 (Commitment) Dataset (unweighted)

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tbody>
<tr>
<td>1 Ethical Leadership</td>
<td>3.76</td>
<td>.74</td>
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<td></td>
<td>.95</td>
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<td>2 Rank JrNCM (dummy)</td>
<td>.26</td>
<td>.44</td>
<td>-.16**</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Rank (continuous)</td>
<td>6.72</td>
<td>3.74</td>
<td>.17**</td>
<td>-.72**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Organizational Fairness Climate</td>
<td>3.19</td>
<td>.72</td>
<td>.32**</td>
<td>-.19**</td>
<td>.25**</td>
<td>.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Career Satisfaction (single-item)</td>
<td>5.28</td>
<td>1.27</td>
<td>.33**</td>
<td>-.15**</td>
<td>.15**</td>
<td>.44**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Affective Commitment</td>
<td>3.40</td>
<td>.72</td>
<td>.26**</td>
<td>-.13**</td>
<td>.14**</td>
<td>.37**</td>
<td>.45**</td>
<td>.80</td>
</tr>
</tbody>
</table>

N = 1266  ** correlations significant at the .01 level, *correlations significant at the .05 level; α’s for scale measures on diagonal in bold

Table 7: 2004 (Commitment) Dataset - Results from Multiple Regression Analyses: Influence of Ethical Leadership on Follower Affective Commitment (H8)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Affective Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.02</td>
</tr>
<tr>
<td>Gender</td>
<td>.01</td>
</tr>
<tr>
<td>Tenure</td>
<td>.07</td>
</tr>
<tr>
<td>Education</td>
<td>.02</td>
</tr>
<tr>
<td>French Language</td>
<td>0</td>
</tr>
<tr>
<td>Marital Status</td>
<td>.09**</td>
</tr>
<tr>
<td>Hours worked/wk</td>
<td>.01</td>
</tr>
<tr>
<td>L1-Organization</td>
<td>.01</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
</tr>
<tr>
<td>Ethical Leadership</td>
<td>.25***</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.08</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>.06</td>
</tr>
<tr>
<td>F</td>
<td>11.87**</td>
</tr>
<tr>
<td>N (listwise)</td>
<td>1218</td>
</tr>
</tbody>
</table>

Standardized regression coefficients shown
* $p < .05$, **$p < .01$, ***$p < .001$
Table 8: OLS Regressions for Hypothesis 9: Ethical leadership partially mediates the relationship between follower rank (continuous) and follower affective commitment

<table>
<thead>
<tr>
<th>Dependent Variable:</th>
<th>Affective Commitment</th>
<th>Ethical Leadership</th>
<th>Affective Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.004***</td>
<td>3.550***</td>
<td>2.193***</td>
</tr>
<tr>
<td>Age</td>
<td>.001</td>
<td>.004</td>
<td>0</td>
</tr>
<tr>
<td>Male</td>
<td>.019</td>
<td>.007</td>
<td>.018</td>
</tr>
<tr>
<td>Tenure</td>
<td>.003</td>
<td>-.005</td>
<td>.004</td>
</tr>
<tr>
<td>Education&gt;HS</td>
<td>-.067</td>
<td>-.008</td>
<td>-.064</td>
</tr>
<tr>
<td>French</td>
<td>-.004</td>
<td>-.103*</td>
<td>.019</td>
</tr>
<tr>
<td>Married</td>
<td>.155**</td>
<td>-.036</td>
<td>.164**</td>
</tr>
<tr>
<td>L1-Org</td>
<td>.004</td>
<td>-.01</td>
<td>.004</td>
</tr>
<tr>
<td>Hrs worked/wk</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rank (continuous)</td>
<td><strong>.025</strong>*</td>
<td>.033***</td>
<td><strong>.018</strong></td>
</tr>
<tr>
<td></td>
<td>(.007)</td>
<td>(.008)</td>
<td>S_a (.007)</td>
</tr>
<tr>
<td>Ethical Leadership</td>
<td></td>
<td></td>
<td>.223***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>b (.027)</td>
</tr>
<tr>
<td>R²</td>
<td>.033</td>
<td>.034</td>
<td>.087</td>
</tr>
<tr>
<td>R² Adjusted</td>
<td>.026</td>
<td>.026</td>
<td>.080</td>
</tr>
<tr>
<td>F</td>
<td>4.551***</td>
<td>4.636***</td>
<td>11.334**</td>
</tr>
<tr>
<td>N</td>
<td>1191</td>
<td>1191</td>
<td>1191</td>
</tr>
</tbody>
</table>

*p < .05  **p < .01  ***p < .001

Unstandardized regression coefficients are shown; standard errors in parentheses; Sobel’s path coefficients shown; Education 1 = > High School; Sobel’s Test Statistic Aroian = 3.67, (p < .001)
Table 9: OLS Regressions for Hypothesis 10: Ethical leadership partially mediates the relationship between follower rank (continuous) and organizational fairness climate

<table>
<thead>
<tr>
<th>Dependent Variable:</th>
<th>Organizational Fairness Climate</th>
<th>Ethical Leadership</th>
<th>Organizational Fairness Climate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.048***</td>
<td>3.550***</td>
<td>2.137***</td>
</tr>
<tr>
<td>Age</td>
<td>-.005</td>
<td>.004</td>
<td>.054</td>
</tr>
<tr>
<td>Male</td>
<td>.056</td>
<td>.007</td>
<td>-.002</td>
</tr>
<tr>
<td>Tenure</td>
<td>-.003</td>
<td>-.005</td>
<td>-.010</td>
</tr>
<tr>
<td>Education&gt;HS</td>
<td>-.013</td>
<td>-.008</td>
<td>.028</td>
</tr>
<tr>
<td>French</td>
<td>.002</td>
<td>-.103*</td>
<td>.028</td>
</tr>
<tr>
<td>Married</td>
<td>-.002</td>
<td>-.036</td>
<td>.007</td>
</tr>
<tr>
<td>L1-Org</td>
<td>.001</td>
<td>-.001</td>
<td>.001</td>
</tr>
<tr>
<td>Hrs worked/wk</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rank (continuous)</td>
<td>.053***</td>
<td>.033***</td>
<td>a .044***</td>
</tr>
<tr>
<td></td>
<td>(.007)</td>
<td>(.007)</td>
<td>S_a (.007)</td>
</tr>
<tr>
<td>Ethical Leadership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.257*** b</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(.027) S_b</td>
</tr>
<tr>
<td>R²</td>
<td>.064</td>
<td>.034</td>
<td>.131</td>
</tr>
<tr>
<td>R² Adjusted</td>
<td>.057</td>
<td>.026</td>
<td>.124</td>
</tr>
<tr>
<td>F</td>
<td>9.087***</td>
<td>4.636***</td>
<td>18.071***</td>
</tr>
<tr>
<td>N</td>
<td>1210</td>
<td>1210</td>
<td>1210</td>
</tr>
</tbody>
</table>

* p < .05  ** p < .01  *** p < .001

Unstandardized regression coefficients are shown; standard errors in parentheses; Sobel’s path coefficients shown; Education 1 = > High School; Sobel’s Test Statistic Aroian = 4.21, (p < .001)
Table 10: OLS Regressions for Hypothesis 11: Ethical leadership partially mediates the relationship between follower rank (continuous) and career satisfaction

<table>
<thead>
<tr>
<th>Dependent Variable:</th>
<th>Career Satisfaction</th>
<th>Ethical Leadership</th>
<th>Career Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.994***</td>
<td>3.550***</td>
<td>3.239***</td>
</tr>
<tr>
<td>Age</td>
<td>-.002</td>
<td>.004</td>
<td>-.005</td>
</tr>
<tr>
<td>Male</td>
<td>-.068</td>
<td>.007</td>
<td>-.070</td>
</tr>
<tr>
<td>Tenure</td>
<td>.003</td>
<td>-.005</td>
<td>.005</td>
</tr>
<tr>
<td>Education&gt;HS</td>
<td>-.057</td>
<td>-.008</td>
<td>-.047</td>
</tr>
<tr>
<td>French</td>
<td>-.036</td>
<td>-.103*</td>
<td>.016</td>
</tr>
<tr>
<td>Married</td>
<td>.087*</td>
<td>-.036</td>
<td>.204*</td>
</tr>
<tr>
<td>L1-Org</td>
<td>.003</td>
<td>-.001</td>
<td>.004</td>
</tr>
<tr>
<td>Hrs worked/wk</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rank (continuous)</td>
<td><strong>.046</strong>*</td>
<td>.034***</td>
<td>a .029*</td>
</tr>
<tr>
<td></td>
<td>(.013)</td>
<td>(.007)</td>
<td>S_a (.012)</td>
</tr>
<tr>
<td>Ethical Leadership</td>
<td></td>
<td>.497***</td>
<td>b</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.047)</td>
<td>S_b</td>
</tr>
<tr>
<td>R^2</td>
<td>.024</td>
<td>.034</td>
<td>.108</td>
</tr>
<tr>
<td>R^2 Adjusted</td>
<td>.016</td>
<td>.026</td>
<td>.101</td>
</tr>
<tr>
<td>F</td>
<td>3.201**</td>
<td>4.636***</td>
<td>14.345***</td>
</tr>
<tr>
<td>N</td>
<td>1193</td>
<td>1193</td>
<td>1193</td>
</tr>
</tbody>
</table>

* p < .05    **p < .01    ***p < .001

Unstandardized regression coefficients are shown; standard errors in parentheses; Sobel’s path coefficients shown; Education 1 = > High School; Sobel’s Test Statistic Aroian = 4.40, (p < .001)
Chapter Five: Construct and Model Replication

One of the strengths of this program of research is that the central concept of ethical leadership was modeled in three different datasets and related to similar variables across these datasets. Further, a series of Confirmatory Factor Analyses (CFA) were performed on each measurement and structural model utilized in each dataset to support the psychometric appropriateness of the study variables. Concurrently, a Harman’s Single Factor Test utilizing CFA was performed on the 2007 (Ethics) Dataset Measurement Model to initially establish the distinctiveness of ethical leadership and to rule out threats of Common Method Variance (CMV). The observations associated with the CFAs are discussed below.

Assessing the Fit of Measurement and Structural Models

2007 (Ethics) Dataset Measurement model. CFA using maximum likelihood estimation with AMOS 18 was performed to test the adequacy of the measurement model containing: ethical leadership, utilitarianism, formalism, organizational fairness climate, and career satisfaction. The five-factor measurement model depicted in Figure 4 had a good fit to the data ($\chi^2 = 8172.48$, $df = 1119$; $p < .001$; $CFI = .83$; $RMSEA = .07$; $PNFI = .74$; $N = 1487$).\(^{15 16}\)

In addition to testing the five-factor measurement model, a series of confirmatory factor analyses were conducted to establish the distinctiveness of the study variables and to

---

\(^{15}\) The ovals in Figures 4 represent the latent factors; rectangles in subsequent figures represent either single items or dichotomous measures; individual items that load on the latent factors and their measurement error/disturbance terms are not shown; double-headed arrows indicate expected correlations.\(^{16}\) Allowing error terms to correlate within each individual construct (see footnotes 11, 12, and 13) results in a very good fitting model ($\chi^2 = 5544.26$, $df = 1093$; $p < .001$; $CFI = .89$; $RMSEA = .05$; $PNFI = .77$; $N = 1487$).
rule out the possibility that CMV posed a serious threat to the findings in this study. The measurement model was compared with a three-factor model (where formalism and utilitarianism were combined into a single factor, and career satisfaction and organizational fairness climate were combined into a single factor), \( \chi^2 = 11937.0, df = 1124; p < .001; \) CFI = .73; RMSEA = .08; PNFI = .66; N = 1487). The measurement model was also compared to a one-factor model (where all constructs were combined into a single factor), \( \chi^2 = 19480.26, df = 1127; p < .001; \) CFI = .55; RMSEA = .11; PNFI = .49; N = 1487). The five-factor measurement model produced a significant improvement in chi-squares over both the three-factor model \( \Delta \chi^2 = 3764.52, df = 5, p < .001 \) and the one-factor model \( \Delta \chi^2 = 11370.81, df = 8, p < .001 \) indicating a much better fit.

In addition to supporting the distinctiveness of the study variables, the latter procedure represented a robust variation of the Harman’s Single Factor Test and also served as a test for CMV. Podsakoff et al. (2003) assert that the Harman’s Single Factor Test is one of the most widely used techniques used by researchers to address the issue of CMV. The basic assumption of this technique is that if CMV is present, then one single factor will account for the majority of the covariance among the measures. Although this test is traditionally conducted utilizing exploratory factory analysis, confirmatory factory analysis as utilized in the present study, is considered a more robust test of the conjecture that a single factor accounts for all of the variance in the data (Podsakoff et al., 2003). The \( \Delta \chi^2 \) results above indicate that the one-factor model is significantly worse fitting than all other proposed models and therefore provides evidence to suggest that CMV does not pose a serious threat to the findings of this study.
2007 (Ethics) Dataset Structural model. After confirming that the measurement model fit the data well, the proposed structural model depicted in Figure 5 was tested with rank (JrNCM), deployed, utilitarianism, and formalism predicting ethical leadership, and ethical leadership in turn predicting career satisfaction and organizational fairness climate. Results of the structural analysis also provided a good fit to the data ($\chi^2 = 8970.63, df = 1219; p < .001; CFI = .81; RMSEA = .07; PNFI = .73; N = 1487$).

2005 (Diversity) Dataset Measurement model. CFA using maximum likelihood estimation with AMOS 18 was performed to test the adequacy of the measurement model containing: ethical leadership, multicultural ideology, organizational fairness climate, and career satisfaction. The four-factor measurement model depicted in Figure 6 had a good fit to the data ($\chi^2 = 6659.95, df = 813; p < .001; CFI = .84; RMSEA = .07; PNFI = .74; N = 1592$).\(^{17}\)

2005 (Diversity) Dataset Structural model. After confirming that the measurement model had a good fit, the proposed structural model depicted in Figure 7 was tested with rank (JrNCM), predicting ethical leadership, and ethical leadership in turn predicting career satisfaction, organizational fairness climate, and multicultural ideology. Results of the structural analysis also provided a good fit to the data ($\chi^2 = 7520.78, df = 857; p < .001; CFI = .82; RMSEA = .07; PNFI = .73; N = 1487$).\(^{18}\)

2004 (Commitment) Dataset Measurement model. CFA using maximum likelihood estimation with AMOS 18 was performed to test the adequacy of the measurement model containing: ethical leadership, affective commitment, and organizational fairness

---

\(^{17}\) Correlating error terms produced a very good fit to the data ($\chi^2 = 4203.56, df = 790; p < .001; CFI = .91; RMSEA = .05; PNFI = .78; N = 1592$).

\(^{18}\) Correlating error terms produced a very good fit to the data ($\chi^2 = 5055.92, df = 834; p < .001; CFI = .89; RMSEA = .06; PNFI = .77; N = 1592$).
climate. Career satisfaction was not included in the measurement model because it was only available as a single-item measure in this dataset and therefore its error variance could not be modeled. The three-factor measurement model depicted in Figure 8 had a good fit to the data ($\chi^2 = 2144.76, df = 321; p < .001; CFI = .91; RMSEA = .07; PNFI = .76; N = 1341$).\(^{19}\)

**2004 (Commitment) Dataset Structural model.** After confirming that the measurement model had a good fit, the proposed structural model depicted in Figure 9 was tested with rank (JrNCM) predicting ethical leadership, and ethical leadership in turn predicting career satisfaction, organizational fairness climate, and affective commitment. Results of the structural analysis also provided a good fit to the data ($\chi^2 = 2989.90, df = 375; p < .001; CFI = .87; RMSEA = .07; PNFI = .76; N = 1341$).\(^{20}\)

**Additional Analyses: Sobel’s Path Coefficients in Each of the Three Datasets**

Figure 10 is a model depicting Sobel’s Distribution of Coefficients for ethical leadership partially mediating the effect of rank on organizational fairness climate. Table 11 lists the various Sobel’s paths as unstandardized regression coefficients between the antecedent, mediator, and outcome variable in all three datasets. The \(a\)-path, or the effect of rank on the mediator, ethical leadership, ranges in value from \(beta\) (unstandardized regression coefficient) = .03 to .05 indicating that the effect of rank is consistent across all three datasets. This tight relationship can be explained by the fact that rank was an objective and stable indicator constructed identically across all three studies. The \(b\)-path, or the effect of the mediator, ethical leadership on organizational fairness climate contains a wider range

---

\(^{19}\) Correlating error terms produced a very good fit to the data ($\chi^2 = 1409.83, df = 304; p < .001; CFI = .94; RMSEA = .05; PNFI = .75; N = 1341$).

\(^{20}\) Correlating error terms produced a very good fit to the data ($\chi^2 = 2242.71, df = 358; p < .001; CFI = .91; RMSEA = .06; PNFI = .73; N = 1341$).
of values. These values range from $\beta = .26$ to .69. This wider range is explained by the fact that organizational fairness climate measure was worded slightly differently in the 2007 (Ethics) dataset. When organizational fairness climate was assessed with identically worded measures, the $b$-path ranged from $\beta = .26$ to .29. Finally, as can be seen in Table 11, the direct and indirect effects ($c$, and $c'c$ paths respectively) all produced consistent effect sizes.

Confirmatory Factor Analyses on the Measurement and Structural Models

Utilizing a more rigorous methodology than the Sobel’s test coefficients above, a series of Confirmatory Factor Analyses on the measurement model for each of the datasets using AMOS 18 provided support that the ethical leadership construct fits the data well. Utilizing the more conservative approach and not correlating error terms: CFI values ranged from .83 to .91, RMSEA values were .07 for all three measurement models, and PNFI values ranged from .74 to .76. Similarly, fit indices for the structural models across all three datasets range from: CFI = .81 to .87; RMSEA = .07 for all three structural models; and, PNFI = .73 to .76. An inspection of the standardized regression coefficients for all of the main paths in the models reveals that they are similar in magnitude and direction further contributing to the psychometric appropriateness of the constructs utilized (see Table 12).

Replication of Common-item Measurement Models

Further comparison of measurement models across all three datasets was facilitated by specifying “replication” measurement models where model specifications only included those items consistent in all three measurement models (and thus excluding single-item measures) (see bottom of Table 12). These model specifications report the fit indices and correlation between ethical leadership and organizational fairness climate. CFI values ranged
from .91 to .93; RMSEA values were .08 for all three measurement models; and, PNFI values ranged from .73 to .83.

From the replication analyses above, it can be concluded that the constructs modeled fit the data well across all three datasets. The uniformity in effect sizes further supports that similar constructs were being tested throughout this program of research.
Table 11: Table of replication of Sobel’s path coefficients in: 2007 (Ethics) Dataset, 2005 (Diversity) Dataset, 2004 (Commitment) Dataset for the model of ethical leadership partially mediating the relationship between follower rank (continuous) and organizational fairness climate.

<table>
<thead>
<tr>
<th>Sobel’s Path Coefficient</th>
<th>2007 (Ethics) Dataset</th>
<th>2005 (Diversity) Dataset</th>
<th>2004 (Commitment) Dataset</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-path</td>
<td>.04</td>
<td>.05</td>
<td>.03</td>
</tr>
<tr>
<td>b-path</td>
<td>.69</td>
<td>.29</td>
<td>.26</td>
</tr>
<tr>
<td>c'-path</td>
<td>.04</td>
<td>.03</td>
<td>.04</td>
</tr>
<tr>
<td>c-c'-path</td>
<td>.03</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>Model R²-Adjusted</td>
<td>.30</td>
<td>.17</td>
<td>.12</td>
</tr>
</tbody>
</table>

Unstandardized regression coefficients shown; all paths significant to at least ($p < .05$)
Table 12: Summary Table of CFA Results in each of the 3 Datasets (error terms uncorrelated)

<table>
<thead>
<tr>
<th>Model</th>
<th>Fit Statistic</th>
<th>2007 (Ethics) Dataset</th>
<th>2005 (Diversity) Dataset</th>
<th>2004 (Commitment) Dataset</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>N = 1,487 (p &lt; .001)</td>
<td>N = 1,592 (p &lt; .001)</td>
<td>N = 1,341 (p &lt; .001)</td>
</tr>
</tbody>
</table>

**Ethical Leadership Construct**

<table>
<thead>
<tr>
<th></th>
<th>( \chi^2 )</th>
<th>1523.64</th>
<th>1631.20</th>
<th>1507.70</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( df )</td>
<td>104</td>
<td>104</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>CFI</td>
<td>.92</td>
<td>.92</td>
<td>.91</td>
</tr>
<tr>
<td></td>
<td>RMSEA</td>
<td>.10</td>
<td>.10</td>
<td>.10</td>
</tr>
<tr>
<td></td>
<td>PNFI</td>
<td>.79</td>
<td>.70</td>
<td>.70</td>
</tr>
</tbody>
</table>

**Measurement Model**

<table>
<thead>
<tr>
<th></th>
<th>( \chi^2 )</th>
<th>8172.48</th>
<th>6659.95</th>
<th>2144.76</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( df )</td>
<td>1119</td>
<td>813</td>
<td>321</td>
</tr>
<tr>
<td></td>
<td>CFI</td>
<td>.83</td>
<td>.84</td>
<td>.91</td>
</tr>
<tr>
<td></td>
<td>RMSEA</td>
<td>.07</td>
<td>.07</td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td>PNFI</td>
<td>.74</td>
<td>.74</td>
<td>.76</td>
</tr>
</tbody>
</table>

**Structural Model**

<table>
<thead>
<tr>
<th></th>
<th>( \chi^2 )</th>
<th>8970.63</th>
<th>7520.78</th>
<th>2989.90</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( df )</td>
<td>1219</td>
<td>857</td>
<td>375</td>
</tr>
<tr>
<td></td>
<td>CFI</td>
<td>.81</td>
<td>.82</td>
<td>.87</td>
</tr>
<tr>
<td></td>
<td>RMSEA</td>
<td>.07</td>
<td>.07</td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td>PNFI</td>
<td>.73</td>
<td>.73</td>
<td>.76</td>
</tr>
</tbody>
</table>

Rank->EL \( \beta = -.10 \) \( \beta = -.17 \) \( \beta = -.16 \)
EL->OFairClimate \( \beta = .55 \) \( \beta = .46 \) \( \beta = .38 \)
EL->CareerSat \( \beta = .56 \) \( \beta = .61 \) \( \beta = .34 \)

**Cross-validation Measurement Model**

<table>
<thead>
<tr>
<th></th>
<th>( \chi^2 )</th>
<th>1806.90</th>
<th>1918.64</th>
<th>1750.75</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( df )</td>
<td>188</td>
<td>188</td>
<td>188</td>
</tr>
<tr>
<td></td>
<td>CFI</td>
<td>.93</td>
<td>.92</td>
<td>.91</td>
</tr>
<tr>
<td></td>
<td>RMSEA</td>
<td>.08</td>
<td>.08</td>
<td>.08</td>
</tr>
<tr>
<td></td>
<td>PNFI</td>
<td>.83</td>
<td>.74</td>
<td>.73</td>
</tr>
</tbody>
</table>

EL->OFairClimate \( \beta = .54 \) \( \beta = .44 \) \( \beta = .37 \)

Standardized regression coefficients shown as \( \beta \)-values
Figure 4. 5-Factor Measurement Model. Standardized regression coefficients shown; all paths significant to \( p < .001 \). Fit Statistics: \( \chi^2 = 8172.48, df = 1119, p < .001 \); CFI = .83; RMSEA = .07; PNFI = 74; \( N = 1487 \).
Figure 5. 5-Factor Structural Model. Standardized regression coefficients shown; all paths significant to $p < .001$ (except Deployed $\rightarrow$ Ethical Leadership: $p = .23$; the SEM software utilized was incapable of analyzing weighted data). Fit Statistics: $\chi^2 = 8970.63, df = 1219, p < .001$; CFI = .81; RMSEA = .07; PNFI = 73; N = 1487.
Figure 6: CFA of 4-Factor Measurement Model – 2005 (Diversity) Dataset

Figure 6. 4-Factor Measurement Model. Standardized regression coefficients shown; all paths significant to $p < .001$. Fit Statistics: $\chi^2 = 6659.95$, $df = 813$, $p < .001$; CFI = .84; RMSEA = .07; PNFI = 74; N = 1592.
Figure 7: 4-Factor Structural Model – 2005 (Diversity) Dataset

Figure 7. 4-Factor Structural Model. Standardized regression coefficients shown; all paths significant to \( p < .001 \). Fit Statistics: \( \chi^2 = 7520.78, df = 857, p < .001; \) CFI = .82; RMSEA = .07; PNFI = 73; \( N = 1592 \).
Figure 8: CFA of 3-Factor Measurement Model – 2004 (Commitment) Dataset

Figure 8. 3-Factor Measurement Model. Standardized regression coefficients shown; all paths significant to \( p < .001 \). Fit Statistics: \( \chi^2 = 2144.76, df = 321, p < .001; CFI = .91; \) RMSEA = .07; PNFI = 76; N = 1341.
Figure 9. 3-Factor Structural Model. Standardized regression coefficients shown; all paths significant to $p < .001$. Fit Statistics: $\chi^2 = 2989.90$, $df = 375$, $p < .001$; CFI = .87; RMSEA = .07; PNFI = 76; N = 1341.
Figure 10: Sobel’s Path Coefficient Model

Total Effect:

\[ \text{Direct Effect: } \]

\[ \text{Indirect Effect: } c - c' \text{ or, } ab \]

Figure 10. Sobel’s Path Coefficient Model depicting Sobel’s path coefficients, total effect, and direct effect relationships for the Org Fairness Climate partial mediation.
Chapter Six: Conclusion

General Discussion

This program of research has established a number of relevant and useful findings for both theory and practice. A unique finding that advances our knowledge of the ethical leadership concept is that a follower’s rank/status is positively related to his/her perceptions of ethical leadership. Owing to the developmental nature of the organization studied, the training received during one’s ascent up the organizational hierarchy might function to align the leader’s approach to be more consistent with the tenets of human capital theory. Since rank and training were argued to function as correlates, then the positive association between rank and ethical leadership can establish this organization’s approach to leadership development as a useful model for other institutions to imitate. In doing so, this finding also begins to address Brown and Treviño’s (2005) call for research to investigate ethical leadership at different levels in the organization and accomplishes this from the perspective of the follower. This finding also supports Mayer et al.’s (2009) “Trickle-Down Model” of ethical leadership from a unique vantage point. In this model, Mayer et al. established that ethical leadership cascades from one organizational level to the next – starting at the top. The present study argued that since the perceived importance of a job increases with rank (Levine & Butler, 1952) and rank is reflective of firm-specific investments in training (Becker, 1964) that serve to enhance the cuing function of modeled conduct (Bandura, 1977; 1986), the cascading effect of ethical leadership becomes more pronounced at higher ranks in the organization which is also consistent with Treviño et al. (2008). Therefore organizations desiring their leaders to be perceived as ethical by their followers, are advised to target their training efforts in ethics education to all levels in the organizational hierarchy and explicitly
make advancements in rank contingent upon that training – as in the case of the CF’s professional development framework; such an effort it is argued can capitalize on the benefits of the ethical leadership concept and serve as a key component of an organization’s corporate citizenship strategy. This assertion serves to underscore the importance of the ethics training function at every level in the organization by enhancing the leadership agency of all those charged with the responsibility of leading others no matter where they are positioned in the organizational hierarchy. The knowledge that the global financial crisis could have been averted had the axioms of ethical leadership been observed, further underscores the utility of linking rank to the amount of firm-specific ethics training received as a component of professional development.

An original finding in this program of research was that ethical predispositions moderate the effect of the boundary-spanning position “deployed” on perceptions of ethical leadership. This finding addresses Brown and Treviño’s (2006) proposition that moral intensity enhances the relationship between ethical context and ethical leadership and extends the work of other researchers (Brady & Wheeler 1996; Schminke & Wells, 1999; Reynolds, 2006) by further highlighting how ethical predispositions can operate to influence perceptions of ethical leadership in different settings. This finding also represents one of the first empirical tests of Brady’s (1985) Janus-headed model of ethical theory demonstrating that utilitarianism and formalism are not mutually exclusive and more importantly, they do operate concurrently in certain contexts. The context in which the latter was tested provides the first known empirical evidence to support Thompson’s (1967) discourse on boundary-spanning.
The finding of a positive relationship between ethical leadership and the organization’s fairness climate (as perceived by the follower), as well as the finding that follower rank and fairness climate are also positively related both serve to support Ostroff et al.’s (2003) notion that leaders serve as interpretive filters of the organization’s climate. These findings also address Treviño and Harrison’s (2006) proposition that an ethical context that supports ethical conduct will be positively related to ethical leadership.

Overall, across all three datasets, some of the research results also serve to extend earlier findings in the literature. For example, Khunita and Suar’s (2004) finding that ethical leadership was positively related to affective commitment in India (both private and public sectors) was replicated with a much larger sample and in a different cultural context (individualistic culture versus collectivist culture). Building on Khunita and Suar’s research, the ethical leadership concept was also extended by highlighting its ability to shape positive multicultural attitudes in followers. This finding also lends support to Resick et al. (2006) who first suggested that the normatively appropriate leader modeling mechanism as explained by social cognitive theory inherent in ethical leadership, was universally supported across cultures.

Finally, the findings supporting the mediating influence of ethical leadership on follower rank and its outcomes contribute to the limited literature (Walumbwa & Schaubroeck, 2009; Piccolo et al., 2010) highlighting that ethical leadership functions as a mediating mechanism for a key antecedent variable such as rank to have an impact on pragmatic workplace outcomes - namely, follower affective commitment, organizational climate, and career satisfaction. The practical implications of these results suggest that ethical leadership is instrumental in both attending to the ethical imperative of the
employment relationship for leaders and concomitantly enhancing the employment relationship for followers.

**Limitations and Directions for Future Research**

Throughout this program of research, findings were replicated with three independent datasets utilizing different statistical tools/techniques/analyses to address some of the limitations inherent in these data. The author acknowledges that there are limitations that affect the generalizability of this program of research. These are mainly due to the generalizability of results to other settings. Since this sample deals only with military personnel, it remains unclear if these findings generalize. However, because of the requirement to conform to Canadian laws respecting diversity and employment equity, and considering that the CF contains a wide representation of occupations similar to those found in the private and public sectors, it could be argued that the CF is representative of the Canadian working population.

A selection bias while mitigated because the sample was randomly chosen from the sample frame could have resulted from other factors such as an occupational bias. For example, respondents in administrative and logistics occupations of the CF could have viewed the completion of an attitudinal survey as a typical task in the course of their day to day work and thus may have been more inclined to participate, while members in the operational/combat arms occupations might have viewed this task as atypical and chose not to participate. A variation of this bias could involve the accessibility of a computer during the data collection phase of the first study in this program of research. Those occupations involved in field operations such as the combat arms – especially at the lowest ranks, may
not have had the same access to a personal computer as others in the administrative or logistics occupations. Remedies to the latter two limitations could involve recruiting participants from other sources by expanding the Your-Say survey to include civilian members of DND as well as members of the Primary Reserve.

The self-report nature of some of the survey items also limits generalizability notwithstanding the fact that the central concept of ethical leadership was not self-report. To address this concern, future Your-Say surveys should incorporate research designs whereby both leaders and subordinates rate each other on key measures and then efforts are made to match leader-subordinate responses.

The literature offers further discourse in addressing generalizability in a program of research of this type. Schwab (1999) asserts that proof of external generalization must be obtained through replication. One avenue to increase the generalizability of the present study is to replicate the study on a different sample to see if key relationships hold.

A further limitation occurs when measures of two or more variables, in this case related to gathering data such as perceptions of one’s own career satisfaction, perceptions of ethical climate, and perceptions of ethical leadership of the respondents’ immediate supervisor, are collected from the same respondents at the same time and then attempts are made to interpret their correlation. Podsakoff and Organ (1986) refer to this as Common Method Variance (CMV). The underlying rationale for the threat that CMV poses is centered on the idea that when many measures originate from the same source, any defect in one of the measures can automatically contaminate those remaining. Podsakoff et al. (2003), underscore the importance of attempting to account for error variance by asserting that up to one quarter of the variance in such a situation may be due to systematic error and identify
several procedures ranging in sophistication to deal with this limitation. One such technique, and the technique utilized in this program of research is the Harman’s Single Factor Test conducted utilizing factor analytic techniques where all construct items in the study are included in a factor analysis to determine if the majority of the variance can be accounted for by one general factor (Podsakoff et al., 2003). Another methodology suggested in the literature is to attempt to account for CMV is through the use of Structural Equation Modeling (SEM). In this approach attempts are made to statistically control for the effects of the unmeasured latent methods factor. Utilizing this technique, the variance of responses to a specific measure can be partitioned into three components: trait, method, and random error. Although appealing, this technique is seldom used in the literature owing primarily to its inherent complexity. One final technique that can be utilized to statistically account for CMV is through the use of a “marker-variable”. This technique utilizes a theoretically unrelated scale inserted in the questionnaire to establish a correlation for CMV associated with the cross-sectional design (Lindell & Whitney, 2001). As noted earlier, the results discussed in Chapter 5 demonstrated through a robust confirmatory factor analytic variation of the Harman’s Single Factor Test, that CMV did not pose a threat to the findings in this study.

Social desirability bias and transient mood state are also limitations of self-report data. Social desirability bias refers to respondents’ tendency to answer survey questions in ways that will present them in a positive light, while transient mood state suggests that a respondent’s mood or emotional state can also differentially bias results. A way to deal with these biases is through a longitudinal design whereby the same respondents are administered the Your-Say questionnaire at multiple points in time. Such a design is not possible with the
Your-Say as DND has formal concerns with the possibility of “survey fatigue” and consequently has a policy to ensure that respondents are not selected on multiple occasions to participate in the survey.

A final, but important limitation of the cross-sectional design of this study is that causality cannot be inferred. Causality can only be inferred once covariation is established, alternative explanations are ruled out, and the temporal precedence of the variables under study is established (Kenny, 1979). The latter two conditions cannot be satisfied with the present research design. Future research should seek to test these relationships using multiple sources to report on key variables and to study their relationships over multiple points in time. Future research should also utilize matching techniques to match subordinates with their leader to conduct dyadic research; such a research design would begin to address other gaps in the literature regarding the relational aspect of key variables like ethical leadership at multiple levels in the organization.

To conclude, the aim of this program of research was five-fold: to empirically assess the importance of ethical leadership in the employment relationship; to demonstrate the impact of ethical leadership in different workplace contexts; to examine the role of follower rank/status as an antecedent of ethical leadership; to extend ethical leadership theorizing by highlighting the role of follower ethical predispositions; and, to examine outcomes of ethical leadership not previously tested in the literature such as organizational fairness climate, follower career satisfaction, follower affective commitment and follower views towards multicultural ideology. In the process, Budd’s (2005) concern that IRHR research often fails to consider the ethical imperative of the employment relationship was addressed. Similarly, Brown and Treviño’s (2006) proposition that future research test the extent to which an
ethical context that supports ethical conduct will be positively related to ethical leadership was also addressed.

A future direction implied by some of the findings in this program of research suggest that the close theoretical ties between organizational ethical climate and the ethic of care as well as constructs such as cohesiveness should be explored. This would address Martin and Cullen’s (2006) research question inquiring the extent to which humane and respectful behaviour, if emphasized in an organization’s code of conduct (as is described in the CF Defence Ethics Program through the ethics of care), can produce a caring ethical climate. Thus, additional ethical climates for which psychometric properties with the current sample are known could be operationalized, such as the caring ethical climate, and self-interest-based ethical climate to address more facets of Victor and Cullen’s (1988) ethical climate theory. A test-retest design, on a different sample as suggested above would also be useful in future studies to replicate the important findings in the present program of research to further the case for their generalizability.

Key findings in this program of research dealing with the military deployment scenario should be studied further in different deployment settings with a large sample. The finding that military deployment hurts follower perceptions of ethical leadership and further that the type and level of follower ethical predisposition have pronounced effects on these perceptions is timely and can contribute to efforts in both Canada and the US to better prepare soldiers for deployment. One such program in the US is the US Comprehensive Soldier Fitness program (CSF), whose aim it is to develop psychological resilience in soldiers in response to the decade long war effort in both Iraq and Afghanistan that has taken a toll on the psychological health of combat soldiers. US Army Chief of Staff General G.W.
Casey asserts that the CSF is a command program within the purview of the US Army’s operational leadership and will act as a catalyst for changing the US army culture as a whole (Casey, 2011). In its current form the CSF addresses the dimensions of physical, social, emotional, spiritual, and family dimensions of soldier resilience and only tangentially touches on ethical issues in the social dimension. It is hoped that General Casey’s commitment to adapt program content with the emergence of empirical evidence will serve as the impetus to explore this area further and consider ethical leadership as a contributing dimension of soldier fitness.

Additional directions for future research with the ethical leadership concept include collecting ethical predisposition information from followers and leaders simultaneously so that the influence of a leader’s ethical predispositions on the concept of ethical leadership can also be assessed. In a similar vein, ethical leadership ratings could be obtained from both the leader and the follower (rather than just the follower) to test whether these perceptions align and further, to determine the extent to which any misalignment of perceptions affects outcomes. Emerging methodology involving congruence variables utilizes polynomial regression techniques and response surface analysis to assess congruence/discrepancy effects and represents a promising area of future inquiry.

Another productive area of inquiry for future study introduced in this program of research is the assessment of ethical leadership in other boundary-spanning positions such as those found in the private sector. Such positions could involve the effect of ethical leadership in multinational enterprises (MNE) and transnational corporations since many of these organizations fail to issue specific policy and behavioural guidelines to individual employees involving ethical considerations in a foreign environment. The latter therefore
provides an impetus for ethical leadership to cover this shortfall (Dowling et al., 1994). A North American example is the problem of questionable foreign remuneration by MNEs and their leaders that served as the catalyst for the amendment of the US Foreign Corrupt Practices Act, amended in 1988. Parallel to this concern, Dowling et al. assert that as the world’s concern for environmental issues grows, there will be increasing pressure on governments especially in developed countries to issue greater regulation forcing corporations behave in a socially responsible manner – ethical leadership will aid in this effort.

One final area for future research involves investigating the relational aspect of ethical leadership with a dyadic research design. Because the majority of dyadic organizational research is predicated on the pairing of one actor with one partner forming the focal dyad, its use in the study of the workplace has been limited. However, according to MacKinnon (2008) the “one-with-many design” used rarely in dyadic research involves matching leader responses (actor) to their multiple direct reports (partners) and is therefore more appropriate for the study of leader-subordinate relationships in this context. The latter can also be augmented with a relational construct such as Leader-Member Exchange. When used over multiple time periods, the one-with-many design employs a level of rigour that minimizes many of the limitations highlighted in the present program of research. This design could be extended to include other measures that have not yet been studied with the concept of ethical leadership. Such measures include: creativity, to determine the extent to which ethical leadership “frees-up” followers to think about work not only as a commodity, but also as a platform for innovation and personal growth; employee engagement, to determine the extent to which ethical leadership contributes to employee vigour, dedication,
and absorption in their work; and work-family/family-work conflict. The latter concept of work-family conflict could establish the extent to which spill-over effects from one’s work or even home life might be ameliorated through ethical leadership. As of this writing, little is known in the work-family conflict literature about the mechanisms that serve as a linkage between one’s work and family life – ethical leadership it is believed has the potential to function as one of these linkages.

As a final parting comment, it is reiterated that at the time of this writing, ethical leadership theorizing, according to Yukl (2010) was still in its early stages of development. It is hoped that the ideas presented herein will serve to stimulate additional research on a topic that strives to bring morality to our actions so that the art and science of influencing others always reflects integrity, dignity and respect.
References


Appendix

Measures

Ethical Leadership (Brown et al., 2005)

<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Conducts life in an ethical manner.</td>
</tr>
<tr>
<td>2. Defines success not just by results but also by the way they are obtained.</td>
</tr>
<tr>
<td>3. Listens to what employees have to say.</td>
</tr>
<tr>
<td>4. Disciplines employees who violate ethical standards.</td>
</tr>
<tr>
<td>5. Makes fair and balanced decisions.</td>
</tr>
<tr>
<td>6. Can be trusted.</td>
</tr>
<tr>
<td>7. Discusses business ethics or values with employees.</td>
</tr>
<tr>
<td>8. Sets example of how to do things right in terms of ethics.</td>
</tr>
<tr>
<td>9. Has the best interests of the employee in mind.</td>
</tr>
<tr>
<td>10. When making decisions asks “what is the right thing to do?”</td>
</tr>
</tbody>
</table>

16-item Adapted Measure of Ethical Leadership

<table>
<thead>
<tr>
<th>Item – My supervisor:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adheres to the policies and procedures of the organization.</td>
</tr>
<tr>
<td>2. Considers my views when decisions are being made.</td>
</tr>
<tr>
<td>3. Takes my needs into account when making decisions.</td>
</tr>
<tr>
<td>4. Maintains order and discipline.</td>
</tr>
<tr>
<td>5. Supervisor treats me fairly when decisions are being made.</td>
</tr>
<tr>
<td>6. Makes decisions that are fair and unbiased.</td>
</tr>
<tr>
<td>7. Responds fairly to complaints and concerns.</td>
</tr>
<tr>
<td>8. Ensures an understanding of military values, history, and traditions.</td>
</tr>
<tr>
<td>9. Explains rules and expectations to my team.</td>
</tr>
<tr>
<td>10. Leads by example.</td>
</tr>
<tr>
<td>11. Sets a high standard of ethical behaviour.</td>
</tr>
<tr>
<td>12. Really cares about my well-being.</td>
</tr>
<tr>
<td>13. Treats me with dignity.</td>
</tr>
<tr>
<td>14. Keeps me informed about matters that affect me.</td>
</tr>
<tr>
<td>15. Respects my rights as a person.</td>
</tr>
</tbody>
</table>
**Utilitarianism**

<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The most important consideration in reaching a decision is the consequences of the decision for me personally.</td>
</tr>
<tr>
<td>2. A decision that has a positive outcome is always a good decision.</td>
</tr>
<tr>
<td>3. The only way to judge whether an action is right is by the outcomes of the action.</td>
</tr>
<tr>
<td>4. You can always evaluate the quality of a decision by the results of the decision.</td>
</tr>
</tbody>
</table>

**Formalism**

<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It is important to follow the law and/or regulations at all times.</td>
</tr>
<tr>
<td>2. A person of good character will act with integrity as a guide.</td>
</tr>
<tr>
<td>3. The primary ethical obligation is to care for other human beings.</td>
</tr>
<tr>
<td>4. An action that violates the law is always wrong.</td>
</tr>
<tr>
<td>5. Good character will always lead to good action.</td>
</tr>
<tr>
<td>6. It is not one, but rather a combination of the principles that I use to determine what is right and wrong.</td>
</tr>
<tr>
<td>7. The most important ethical principle is to ensure that nobody is harmed by your actions.</td>
</tr>
<tr>
<td>8. Rules and laws are the most appropriate basis for making ethical decisions.</td>
</tr>
<tr>
<td>9. In making ethical decisions I always try to do what a person of integrity would do.</td>
</tr>
<tr>
<td>10. It is always ethical to show care for another person.</td>
</tr>
<tr>
<td>11. Society’s laws and organizational regulations define what is right and wrong.</td>
</tr>
</tbody>
</table>

**Organizational Fairness Climate (Kelloway et al., 1999)**

2007 Ethics Survey

<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Organizational policies are equally fair to everyone.</td>
</tr>
<tr>
<td>2. This organization looks after its members.</td>
</tr>
<tr>
<td>3. This organization cares for its members.</td>
</tr>
<tr>
<td>4. This organization respects the dignity of all members.</td>
</tr>
<tr>
<td>5. This organization is fair.</td>
</tr>
</tbody>
</table>
### Organizational Fairness Climate

2005 Diversity & 2004 Commitment Survey

<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Organizational policies are equally fair to everyone.</td>
</tr>
<tr>
<td>2. I know the CF will look after my needs if I become injured on the job.</td>
</tr>
<tr>
<td>3. The CF provides a reasonable quality of life for service members and their families.</td>
</tr>
<tr>
<td>4. The CF looks after the families of its service members.</td>
</tr>
<tr>
<td>5. I have faith in the military justice system to grant fair and unbiased judgements.</td>
</tr>
</tbody>
</table>

### Career Satisfaction

<table>
<thead>
<tr>
<th>Item - How satisfied are you with:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The military way of life.</td>
</tr>
<tr>
<td>2. Your quality of life in the CF.</td>
</tr>
<tr>
<td>3. Your service in the CF.</td>
</tr>
<tr>
<td>4. Career management.</td>
</tr>
<tr>
<td>5. Career progression.</td>
</tr>
<tr>
<td>6. The promotion system.</td>
</tr>
<tr>
<td>7. Posting frequency.</td>
</tr>
<tr>
<td>8. Working hours.</td>
</tr>
<tr>
<td>10. Recognition you receive from your supervisor.</td>
</tr>
<tr>
<td>11. Recognition you receive from your organization.</td>
</tr>
<tr>
<td>12. Opportunities for professional development.</td>
</tr>
<tr>
<td>13. Opportunities for personal development.</td>
</tr>
</tbody>
</table>
### Multicultural Ideology (Berry & Kalin, 1995)

<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It is best for Canada if all people forget their different ethnic and cultural backgrounds as soon as possible.</td>
</tr>
<tr>
<td>2. A society that has a variety of ethnic and cultural groups is more able to tackle new problems as they occur.</td>
</tr>
<tr>
<td>3. The unity of this country is weakened by Canadians of different ethnic and cultural backgrounds sticking to their old ways.</td>
</tr>
<tr>
<td>4. If Canadians of different ethnic and cultural origins want to keep their own culture, they should keep it to themselves.</td>
</tr>
<tr>
<td>5. A society that has a variety of different ethnic and cultural groups has more problems.</td>
</tr>
<tr>
<td>6. Canadians should do more to learn about the customs and heritage of different ethnic and cultural groups in this country.</td>
</tr>
<tr>
<td>7. Immigrant parents must encourage their children to retain the culture and traditions of the homeland.</td>
</tr>
<tr>
<td>8. People who come to Canada should change their behaviour to be more like us.</td>
</tr>
</tbody>
</table>

### Affective Commitment (Meyer & Allen, 1997)

<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I would be very happy to spend the rest of my career with the Canadian Forces.</td>
</tr>
<tr>
<td>2. The Canadian Forces has a great deal of personal meaning for me.</td>
</tr>
<tr>
<td>3. I do not feel “part of the family” in the Forces.</td>
</tr>
<tr>
<td>4. I really feel as if the CF’s problems are my own.</td>
</tr>
<tr>
<td>5. I do not feel “emotionally attached” to the CF.</td>
</tr>
<tr>
<td>6. I do not feel a strong sense of “belonging” to the CF.</td>
</tr>
</tbody>
</table>