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Transformational and Active Transactional Leadership: Manifestation, Effects, and Followers'
Expectations across Hierarchical Levels in the Canadian Military

By

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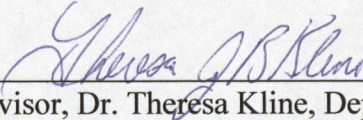
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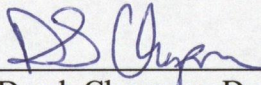
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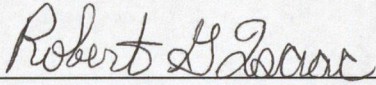
The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "Transformational and Active Transactional Leadership: Manifestation, Effects, and Followers' Expectations across Hierarchical Levels in the Canadian Military" submitted by Gary Ivey in partial fulfillment of the requirements of the degree of Master of Science.



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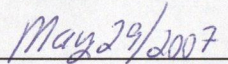
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Abstract

This study examined the manifestation and effects of transformational, contingent reward, and active management-by-exception leadership across hierarchical levels. Furthermore, this study investigated whether or not the relationships between perceived leadership behaviours and effective leadership outcomes were moderated by hierarchical level and followers' expectations. A total of 704 military officers and non-commissioned members rated their immediate supervisors' behaviours and the behaviours they expect from their supervisors. Frequencies of perceived and expected transformational leadership behaviours increased with rank, but frequencies of perceived and expected contingent reward and active management-by-exception leadership behaviours did not differ across ranks. Transformational and contingent reward leadership effects were not moderated by rank or by followers' expectations. The effects of perceived active management-by-exception leadership were moderated by followers' expectations, but not by rank. Participants who expected active management-by-exception leadership and indicated that they received it were positively affected, but those who did not expect it from their supervisors and indicated that they received it were adversely affected.

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CHAPTER ONE: INTRODUCTION

Once the enthusiasm for trait theories of leadership waned in the mid 20th century, several researchers sought to explain how the contextual nature of leadership affected outcomes of interest (e.g., Fiedler, 1964; Hersey & Blanchard, 1969; House, 1971). Although some support for situational and contingency theories of leadership was found, the results were generally mixed and inconclusive (House & Aditya, 1997; Northouse, 2006). This sparked the enthusiasm for a new paradigm of leadership that included charismatic and transformational leadership theories (Burns, 1978, House, 1977). Transformational leadership theory, in particular, gained much attention and, to date, is one of the most popular theoretical frameworks in the leadership area. In many studies, transformational leadership has been lauded for its superior, positive relationship to subordinate satisfaction, performance, motivation, commitment, and ratings of leader effectiveness over transactional leadership (e.g., Bycio, Hackett, & Allen, 1995; Jung & Avolio, 2000; Kane & Tremble, 2000; Lowe, Kroeck, & Sivasubramaniam, 1996). As well, transformational leadership has been recognized for its robustness across conditions (Judge & Piccolo, 2004) and its cross-cultural applicability (Den Hartog, House, Hanges, Ruiz-Quantanilla, & Dorfman, 1999).

Despite the apparent stability and generalizability of transformational leadership, in their most recent review of transformational leadership, Bass and Riggio (2006) concluded that further exploration of the contingent nature of transformational leadership is needed. In particular, they suggested that garnering a better understanding of how it translates across different demographic groups is necessary, and future research needs to move beyond the transformational leader and attend more to the followers of transformational leadership.

One demographic area that has yet to be fully explored in the context of transformational leadership, and the other *full range of leadership* (FRL) factors (Avolio & Bass, 1991), is that of leader level. Accordingly, the purpose of this study was to examine the manifestation and effects of the active FRL factors across hierarchical levels. To do so, using a Canadian Forces sample, this study compared subordinates' ratings of their supervisors' behaviours across four different hierarchical levels, or rank levels, using between-subjects analyses of variance (ANOVAs) in order to determine if they differed as a function of rank. Followers' job satisfaction and their attitudes toward their supervisors were also measured and regressed on their ratings of their supervisors' behaviours. Hierarchical multiple regression was used to determine if rank level moderated the effects of transformational and active transformational leadership.

The second purpose of this study was to measure followers' expectations of their leaders within the context of transformational and active transactional leadership in order to determine if they, too, differed as a function of hierarchical level. Using between-subjects ANOVAs, subordinates' expectations of their supervisors were compared across four rank levels. Finally, this study sought to determine whether followers' expectations of their leaders moderated the effects of their leaders' behaviours, as perceived by subordinates. Centred perceived by expected leadership interaction terms were created for each leadership factor and entered subsequent to the main effects of perceived and expected leadership in a set of hierarchical multiple regression analyses.

The results of the analyses are presented following an overview of the literature, a presentation of hypotheses, and a detailed explanation of the methods employed. The implications of the results are discussed more fully in the discussion section that follows the results. The contributions and limitations of this study, along with recommendations for future

research, are also presented in the discussion section. This manuscript ends with a conclusion that summarizes the principal features and findings presented.

Full Range of Leadership Overview

The original conceptualization of transformational and transactional leadership (Burns, 1978) has since evolved into the nine-factor FRL model which, in addition to five transformational leadership factors, or components, includes three factors of transactional leadership, and laissez-faire leadership. The FRL model falls along a three dimensional (activity x effectiveness x frequency) continuum where, on one end, the active-effective behaviours occur more frequently, and on the other end, the passive-ineffective behaviours are more frequent (Bass et al., 2006). Transformational leadership is the most active-effective dimension. This style of leadership elicits more effort and commitment from followers by attending to emotions, values, ethics, and long-term goals, and by assessing followers' motives, satisfying their individual needs, and treating them with dignity and respect. Transactional leadership consists of both active-effective and passive-ineffective factors and, therefore, falls at the centre of the continuum. Unlike transformational leadership, this style does not individualize followers' needs. It is characterized by leader-follower exchanges, whereby leaders exchange things of value with followers to advance both the leaders' own and followers' agendas. The final FRL dimension, laissez-faire leadership, represented by the absence of leadership, is the most passive-ineffective style. The individual factors that make up each dimension are discussed below.

The five factors of transformational leadership are *idealized influence (behaviour and attributed)*, *inspirational motivation*, *intellectual stimulation*, and *individualized consideration*. Idealized influence is embodied in the leader's behaviour and in attributions that are made concerning the leader by followers. Leaders with high levels of idealized influence are often

described as *charismatic*. They are admired, respected, and trusted. They are endowed by their followers as having extraordinary capabilities, persistence, and determination. They take risks, they can be counted on to do the right thing, and they demonstrate high standards of ethical and moral conduct. Leaders high on inspirational motivation inspire and motivate their followers to become committed to, and be part of, a shared vision or mission. They do so by providing meaning and challenge to their followers' work, arousing team spirit, being enthusiastic and optimistic, leading by example, and demonstrating commitment to goals. Intellectual stimulation describes leaders who stimulate their followers' efforts to be innovative and creative. They question assumptions and approach old situations in new ways. Innovative ideas are solicited from followers, and there is no public criticism of followers' mistakes. Finally, leaders who score high on individualized consideration attend to each individual follower's needs for achievement and growth by acting as a coach or mentor. These leaders demonstrate acceptance of individual differences, their interactions with followers are personalized, and follower development is a priority.

Transactional leadership occurs when the leader rewards or disciplines followers on the basis of their performance. There are three factors of transactional leadership: *contingent reward*, *management-by-exception (active)*, and *management-by-exception (passive)*. Contingent reward leadership is the most constructive of the transactional styles, though generally not as effective as any of the transformational behaviours (Bass et al., 2006; Judge et al., 2004; Lowe et al., 1996). Leaders practicing contingent reward leadership assign, or obtain follower agreement on, what needs to be done with promised or actual rewards offered in exchange for satisfactory completion of the task. In active management-by-exception, the leader actively monitors deviances from standards and mistakes in followers' performance, and takes corrective action as

necessary. Leaders demonstrating passive management-by-exception simply wait for deviances and mistakes to occur before taking corrective action. Although normally not as effective as transformational leadership or contingent reward leadership, management-by-exception may be required and effective in some situations (Antonakis, Avolio, & Sivasubramaniam, 2003; Bass et al., 2006). For example, active management-by-exception may be necessary in situations where safety or adherence to standards is vital, while passive management-by-exception may be used when leaders are required to supervise a large number of followers who report directly to them.

The final FRL dimension, laissez-faire leadership, is actually a form of nonleadership due to its excessively passive nature and resultant negative outcomes. Unlike transactional leadership, laissez-faire leadership is void of transactions altogether - decisions are not made, actions are delayed, responsibilities are ignored, and the leader is absent when needed. To conclude, leaders may use all of the FRL styles, but they may use more of one style than others. Effective leaders are both transactional and transformational. However, the best leaders, as measured by their effect on followers' attitudes and other organizational outcomes, are most frequently transformational, and less effective leaders are passive or concentrate more on corrective actions (Bass et al., 2006).

Full Range of Leadership Effects

Although ongoing controversy exists regarding the distinctiveness of the five transformational factors (Howell & Hall-Merenda, 1999; Judge & Bono, 2000; Judge et al., 2004; Tejeda, Scandura, & Pillai, 2001), as an aggregated higher-order dimension, transformational leadership has been associated with a variety of positive organizational outcomes. Research has demonstrated that transformational leadership augments the effects of transactional leadership on followers' job motivation and commitment (Kane et al., 2000). It has

been suggested that transformational leadership changes regular follower motivation, a transactional outcome, into commitment by providing meaning to work and appealing to followers' values and emotions (Popper, Landau, & Gluskinos, 1992). Transformational leadership has also been associated with increased levels of effort, performance, organizational citizenship behaviours, and satisfaction in followers, and higher ratings of leader effectiveness in a variety of settings and in several different countries (Bass & Avolio, 1989; Hater & Bass, 1988; Judge et al., 2004; Koh, Steers, & Terborg, 1995; Lowe et al., 1996; Singer & Singer, 2001; Zacharatos, Barling, & Kelloway, 2000).

In a recent meta-analysis of 626 correlations from 87 sources, Judge et al. (2004) tested the validity of transformational, transactional, and laissez-faire behaviours in relation to six outcomes deemed characteristic of effective leadership: *follower job satisfaction*, *follower satisfaction with the leader*, *follower motivation*, *leader job performance*, *group/organization performance*, and *leader effectiveness*. Their results revealed that the predictive validity of transformational leadership generalized across all of the leadership criteria. However, it predicted follower job satisfaction, follower satisfaction with the leader, and follower motivation significantly better than the two performance-related outcomes. Interestingly, contingent reward leadership predicted follower job satisfaction and leader job performance significantly better than transformational leadership, and transformational leadership only predicted follower satisfaction with the leader and leader effectiveness significantly better than contingent reward leadership. Meanwhile, laissez-faire leadership produced relatively strong, negative correlations with follower satisfaction with the leader and leader effectiveness. The two management-by-exception dimensions generally produced either weak or moderate correlations with the criteria.

Although the effect sizes were lower than had been expected based on previous findings (e.g., Lowe et al., 1996), the above results support past research touting the effectiveness of transformational leadership. The strengths of transformational leadership appear to be in its superior predictive power over contingent reward leadership (with some exceptions), and the other leadership factors, as well as its robustness across conditions. The robustness of transformational leadership was also demonstrated in studies that have confirmed that transformational leadership is consistent with leader prototypes and positive outcomes in a variety of organizational settings and cultures (Bass, 1997; Den Hartog et al., 1999).

Transformational and Active Transactional Leadership in the Military

There has been much empirical support for the FRL model in the context of military organizations. This should not be surprising considering the development of the FRL model was based on the observations of military officers (Bass, 1990). In their moderator analyses, Judge et al. (2004) found that the predictive power of transformational and contingent reward leadership varied depending on research design, data source, and study setting. Although not statistically significant, the validity coefficient of transformational leadership was higher in the military than in business, college, and public sector settings. As well, in the military, specifically, transformational leadership was more strongly related to the leadership criteria than was contingent reward leadership. Past research using military samples has demonstrated that transformational leadership accounts for significant unique variance in outcomes (e.g., extra effort, motivation, affective commitment) over and above transactional leadership (Kane et al., 2000; Waldman, Bass, & Yammarino, 1990). Despite the weak relationships reported by Judge et al. (2004) with the performance variables, other researchers have found strong relationships between transformational leadership and performance amongst military participants (Bass,

Avolio, Jung, & Berson, 2003; Masi & Cooke, 2000). Furthermore, higher scores on transformational leadership have been reported in junior U.S. naval officers with recommendations for early promotion and better fitness reports (Yammarino & Bass, 1990) and in high performing Israeli soldiers (Gal, 1985). In a longitudinal, field study, Dvir, Eden, Avolio, and Shamir (2002) demonstrated that, compared to those exposed to other training methods, Israeli defense force platoon leaders who underwent three days of FRL training had a more positive influence on aspects of their direct subordinates' development (i.e., self-efficacy, critical-independent thinking approach, and extra effort), and on their indirect subordinates' performance, as measured six months later.

The applicability of transformational leadership in military settings is recognized by the Canadian Forces too, as evidenced by the inclusion of factors associated with transformational and transactional leadership in the Canadian Forces leadership model, upon which all officer and enlisted, or non-commissioned member (NCM), leadership training and practices are based (Canadian Forces Leadership Institute, 2005). Furthermore, the Canadian Forces Directorate of Personnel Applied Research has been measuring the FRL in its leaders stationed throughout Canada and on military operations abroad since 2000. Few studies have examined transformational leadership using Canadian samples (Barling, Weber, & Kelloway, 1996; Den Hartog et al., 1999; Kelloway, Barling, & Helleur, 2000), and only one study (not published) has reported its effects on Canadian military personnel. In that study of North Atlantic Treaty Organization officers, Boyd ((1988), as reported by Bass, 1997) demonstrated that Canadian senior officers performed transformational behaviours at rates comparable to U.S. and German senior officers. However, the effects of transactional leadership on Canadian officers differed from those of U.S. and German officers in that transactional leadership correlated close to zero

with effectiveness. This may suggest that Canadian senior officers do not associate transactional leadership behaviours with leader effectiveness.

The findings above highlight an interesting question: Why is transformational leadership particularly more effective than transactional leadership in the military? One possible explanation derives from research suggesting that transformational leadership may be far more pervasive in collectivistic societies than in individualistic societies (Jung, Bass, & Sosik, 1995). Although the military contexts studied to date have generally been from individualistic societies, military organizations themselves tend to have collectivistic cultures, where the emphasis is on teams and others before self. Another explanation may be drawn from the work of Atwater and Yammarino ((1989), as reported by Bass et al., 2006). They compared ratings of supervisors' behaviours with sources of the supervisors' power and found a larger discrepancy between transformational and transactional leadership where supervisors had legitimate power (the authority to give tasks or assignments) as compared to supervisors with reward power (can provide benefits and advantages) or coercive power (authority to dismiss you from your job). Perhaps, in the military, therefore, leaders' legitimate power allows them to be effectively more transformational and less transactional.

A final possible explanation may stem from the results of Singer et al.'s (2001) study that explored the manifestation of leadership in mechanistic organizations, characterized by standardized operating procedures, rigid career routes and evaluations, and hierarchical structure of ranks and status. Contrary to their expectations, which were based on Bass' (1985) assumption that contingent reward and management-by-exception are favoured in "well-structured, stable and orderly environments" (p.166), they found that, in a sample of New Zealand police officers, actual leader behaviour and leader behaviour preferences were significantly more

transformational than transactional. In their interpretation of the results, Singer et al. offered that the system of reinforcement in mechanistic organizations is so thoroughly entrenched in the organizational structure that leaders themselves may not need to actively provide contingent reinforcement. As the military could be characterized as mechanistic, that rationale may also explain the relevance of transformational leadership in the military.

Whether it is its ability to create stronger bonds between leaders and followers, its appeal to followers on an emotional level, its superior utility in collectivist cultures where members rely heavily on one another, its conduciveness in structured organizations whose leaders have legitimate power, or its power to halt motivational and moral decline during stressful times (Dvir et al., 2002), there is ample empirical support for the effectiveness of transformational leadership, and the ineffectiveness of the passive styles, in military organizations.

Hierarchical Level

One possible moderating variable in the relationship between leadership behaviours and measures of effectiveness is that of the hierarchical level of the leader. Specifically: Do the manifestation and effects of FRL behaviours differ as a function of organizational level? Bass admits that when the FRL was in its early stages of development, he assumed that transformational leadership was a style most applicable to leaders in the upper echelons of organizations (Bass et al., 2006). This early assumption was likely influenced by early research on organizational level which was mainly focused with task and responsibility differences in upper and lower level managers. These studies, conducted between the 1930s and 1980s, generally concluded that upper level managers were more concerned with broad policies, objectives, planning and acting as figureheads, and lower level managers or supervisors tended to be more concerned with training, control of materials and supplies, production and

maintenance (Bass, 1990). By 1985, however, Bass had discovered that transformational leadership could be displayed by middle managers and first-line supervisors. As research related to transformational leadership continued to proliferate over the next decade, evidence supporting the applicability of transformational leadership in various contexts began to mount (e.g., Avolio, Waldman, & Einstein, 1988; Bass, Avolio & Goodheim, 1987) compelling Bass to conclude that the principles of transformational leadership apply at all organizational levels, from first-line supervisors to senior executives, but that higher or lower level leaders can be more or less transformational (Bass et al., 2006).

Few organizations are more concerned with issues related to hierarchical rank and status than the military. The existing data on military samples confirm Bass' notion that transformational leadership exists at all levels, though the frequency of those behaviours differ as a function of leader level. For example, Bass et al. (1985) reported more transformational leadership behaviours, and less transactional behaviour, in senior Army leaders, and Salter (1989, as reported by Bass et al., 2006) reported high transformational leadership scores amongst U.S. Marine Corps commanders of effective helicopter squadrons. In their examination of transformational leadership in U.S. Army officers, Kane et al. (2000) found lower frequencies of transformational behaviours in junior U.S. Army officers than in senior officers. Specifically, relative to platoon leaders (i.e., junior officers), subordinates provided higher ratings of transformational leadership for company commanders and battalion commanders (i.e., senior officers). Furthermore, there was greater differentiation between transformational and transactional behaviours for the two senior commander groups. The lesser degree of differentiation between transformational and transactional leadership in the platoon leaders suggests that transactional behaviours were displayed at rates comparable to transformational

behaviours in those lower ranking officers. Furthermore, the effects of transformational leadership on follower motivation and commitment were more positive as the rank of the officer increased.

Several factors may have affected Kane et al.'s (2000) results, however. First, whereas company commanders and battalion commanders were the direct, or immediate, superiors of the subordinates rating them, the platoon leaders were rated by both direct and indirect subordinates. Secondly, while all the subordinates rating the two senior officer groups were commissioned officers, the platoon leaders were rated by enlisted soldiers. As a result, the senior officers and their subordinates were likely to have been more similar on a number of factors (e.g., background experiences, job responsibilities, career paths) than the platoon leaders and their subordinates. As Kane et al. note, such similarities may have resulted in a closer match in the implicit theories that guided the behaviours of leaders and the ratings made by their followers. A third factor that may have affected the results is the U.S. Army's leadership development system. In the U.S. Army, transformational leadership principles are consistent with advancement in the military hierarchy, such that transformational leadership behaviours are expected more in higher ranking officers than in the lower ranking officers.

The above results suggest that transformational leadership is more prevalent and effective in senior officers than it is for junior officers. According to Atwater, Dionne, Avolio, Camobreco and Lau ((1996), as reported by Kane et al., 2000), this trend appears to continue below the junior officer ranks to officer cadets. Atwater et al. found that successful military cadets were more likely to perform transactional leadership behaviours throughout their precommissioning training, suggesting that transactional leadership is more effective than transformational leadership for officers in-training. Clearly, it appears as though military rank, at least in the

officer corps, can affect the manifestation of leadership style, though the effects of the FRL at different organizational levels are still unclear. Based on their meta-analytic results, Judge et al. (2004) reported that leader level did not moderate the effects of transformational leadership. It should be noted that their data was gathered from a variety of different sources across a number of different settings. Although they provided Q statistics (see Sagie & Koslowsky, 1993) for the estimates for transformational and contingent reward leadership, Judge et al. did not provide Q statistics for each moderator group. As a result, the amount of heterogeneity within the military samples and potential presence of moderators are unknown. Thus, the question remains: Would the results have been different had they examined the moderating effects of leader level using data gathered from military samples only? Furthermore, the research cited above only considered transformational leadership in military officers. Although some have demonstrated the effects of transformational leadership on enlisted personnel (e.g., Dvir et al., 2002; Kane et al., 2000; Masi et al., 2000), little information is available pertaining to the manifestation and effects of the FRL in enlisted leaders. In their section summarizing the effects of rank and status within the context of transformational leadership in the military, Bass et al. (2006) made no reference to the effects on enlisted personnel. Although they mentioned that transformational leadership could be displayed by Army noncommissioned officers (p.185), and they suggested that transformational leadership may be "required in combat by the platoon sergeant" (p.186), they made no reference to studies using enlisted personnel samples, despite citing scores of research examining the FRL amongst officers.

In my literature review, I recovered only one study that tested the effects of transformational leadership in enlisted leaders (Bass, Avolio, Jung, & Berson, 2003). They examined how contingent reward and transformational leadership of Army platoon leaders

(junior officers) and platoon sergeants (a mid-level enlisted rank) predicted performance in uncertain conditions. Although both transformational and contingent reward leadership predicted performance, sergeants' transformational leadership was more predictive of performance than junior officers' transformational leadership. This could be attributed to the fact that sergeants have more daily contact with platoon members than do officers, which may have a greater impact on their training and performance. Another explanation, similar to that used to describe Kane et al.'s (2000) results, is that sergeants and platoon members are more similar on a number of factors (e.g., background experiences, job responsibilities, career paths) than the officers and their enlisted subordinates, resulting in stronger identification with the sergeants, and/or a closer match in the implicit theories that guided sergeants' behaviours and the platoon members' ratings. Nonetheless, this study suggests that transformational leadership is an effective form of leadership for Army sergeants, and the effects of transformational leadership, on at least one outcome, differs as a function of military status.

Based on the lack of research examining the effects of transformational leadership in enlisted personnel relative to the amount of published research pertaining to transformational leadership in the military context, and based on the potential effects rank and status might have on outcomes associated with transformational leadership, it is clear that this is an area that warrants further investigation. The results of such an investigation have important implications for military organizations for at least two reasons. First, the majority of personnel in any military organization are enlisted and, consequently, enlisted leaders by far exceed the number of officers. In that light, it seems strange that leadership in the context of the military has generally focused solely on officers. The reason for the focus on officer leadership is likely due to the fact that officers are generally regarded as the military's "leaders", as opposed to enlisted personnel

who are largely the "doers". Notwithstanding that, enlisted personnel take leadership training throughout their careers and lead junior enlisted personnel at various levels. Second, military leadership development programs focus on different skills and responsibilities according to rank and status. Whereas researchers examining the contextual nature of leadership have examined differences according to other demographic variables, such as gender (Druskat, 1994; Eagly, Johannesen-Schmidt, & van Engen, 2003), age, and education (Vecchio & Boatwright, 2002), these variables are of less consequence in the military because leaders are not evaluated and trained on the basis of those characteristics. A primary purpose of this study, therefore, was to examine the manifestation and effects of the more active-effective FRL factors in the military at all hierarchical levels.

Organizational Setting

A unique opportunity to answer the questions posed above was presented in the context of the Canadian Forces. As part of an ongoing research and consulting initiative, the Canadian Forces has been measuring the FRL in its unit leaders since 2000. Relative to the population of Canada, the Canadian Forces is a small organization, consisting of about 62,000 Regular Force members and 25,000 Reserve Force members. Unlike many other militaries, the Canadian Forces Army, Air Force, Navy and Special Forces elements are centralized. Consequently, the Canadian Forces' structure offers the chance to gather information from respondents from a variety of elements.

The rank structure of the Canadian Forces, notwithstanding untrained cadets, can be categorized into five groups: *junior non-commissioned members* (private to master-corporal), *senior non-commissioned officers and warrant officers* (sergeant to chief warrant officer), *junior officers* (second-lieutenant to captain), *senior officers* (major to colonel), and *general officers*

(brigadier general to general). The Canadian Forces considers all of its personnel, Regular Force and Reserve, officer and non-commissioned member (NCM), members of the profession of arms (Canadian Forces Leadership Institute, 2003). In the Canadian Forces, "a common identity as military professionals and a shared military ethos help create a powerful officer/NCM team" (p.10). Furthermore, its leadership model comprises components associated with the FRL and, according to the Canadian Forces leadership doctrine, transformational leadership is expected at all levels of the organization (Canadian Forces Leadership Institute, 2005).

The requirement for transformational leadership at all hierarchical levels is reflected in the Canadian Forces Performance Appraisal System (CFPAS) which outlines what the organization expects of its members according to rank, apart from role-specific requirements. The CFPAS is the basis upon which members' performance is evaluated and their potential for advancement to the next rank level is assessed. According to the CFPAS, all Canadian Forces NCMs and officers are assessed on the same sixteen performance dimensions. To demonstrate, consider the requirements for master-corporals (MCpl), warrant officers (WO), captains (Capt), and lieutenant-colonels (LCol). On eight of the sixteen dimensions, the requirements for a "mastered" rating are exactly the same for all four ranks. For example, on the *working with others* dimension, all four ranks are expected to actively promote diversity, bring all types of individuals together to function as a cohesive team, and promote team goals by inspiring others and acting as a role model. Clearly, these actions are consistent with the inspirational motivation and individualized consideration factors of transformational leadership. On the *accountability* dimension, all four rank levels are expected to show moral courage by acknowledging mistakes and supporting others, and cultivating confidence in subordinates by loyally supporting their decisions and actions. The trust and moral conduct inherent in this example demonstrates how

aspects of idealized influence are expected in both NCMs and officers. As well, with respect to *ethics and values*, all ranks are required to embody the Canadian Forces' ethical values and encourage them in others (idealized influence), as well as treating others in a respectful manner (individualized consideration). Other noteworthy expectations for all ranks include being an example to others (inspirational motivation) and assuming justifiable risks (idealized influence).

On the dimensions where different requirements do exist based on rank, those differences are indicative of the level of responsibility associated with the rank. For example, whereas LColts are expected to act as role models for team leaders, MCpls are expected to be enthusiastic team members. As well, whereas LColts identify and develop the policies that drive change, MCpls are simply expected to communicate change to subordinates.

Although there are too many links between the CFPAS requirements and transformational leadership to include them all here, the examples described above suggest that certain aspects of transformational leadership are expected in all ranks, yet more aspects of transformational leadership are expected at higher levels. It should be reiterated that these performance requirements are the basis for a mastered performance rating and promotion potential. As such, these actions are characteristic of effective leadership. Therefore, assuming that Canadian Forces leaders are doing what is expected of them, and to the extent that their behaviours are associated with effective leadership, I propose the following hypotheses:

Hypothesis 1a: Subordinates' perceived transformational leadership behaviour frequency ratings will increase with rank.

Hypothesis 1b: More frequent transformational leadership behaviours by supervisors, as perceived by subordinates, will predict effective leadership outcomes at all rank levels.

Not only do NCM and officer performance requirements differ on the basis of transformational leadership, they also differ with respect to transactional leadership expectations. From the mastered performance requirements lists, it appears as though actions associated with transactional leadership are expected of NCMs more so than of officers. For example, on the *supervising* dimension, whereas LColts generally need to be conversant with military law so they can be more effective in their formal judiciary roles, it is the MCpls who are expected to identify the disciplinary problems and take appropriate action. As well, with regard to *evaluating and developing subordinates*, LColts are expected to devise innovative strategies to develop subordinates, and MCpls are required to make accurate and insightful observations of subordinates' performance and provide constructive feedback, implying a more direct and active role in identifying performance deficits. Finally, in the *resource management* dimension, LColts are expected to excellently apply advanced logistical and business processes, whereas MCpls are expected to take preventive resource control and security measures. Thus, the behaviours pertaining to MCpls are characteristic of the more active transactional factors. WOs too are expected to lead in an actively transactional manner in certain instances, though to a lesser degree than junior NCMs. As examples, with regard to *supervising*, WOs are required to oversee challenging and complex tasks, coordinate the efforts of subordinates, and strictly enforce disciplinary standards. In accordance with Bass et al.'s (2006) suggestion that active transactional leadership may be effective in some situations where security and safety are important, this distribution of performance requirements makes sense.

Perhaps the weaker relationship between transactional leadership and outcomes in the context of the military is due to the fact that the results were based on predominantly officer respondents. Instead, this study will explore the manifestation and effects of transactional

leadership, along with transformational leadership, at all hierarchical levels within the military. To the extent that active transactional leadership (i.e., contingent reward and active management-by-exception) is deemed characteristic of mastered performance and effective leadership in the lower ranks, I propose the following hypotheses:

Hypothesis 2a: Subordinates' perceived active transactional leadership behaviour frequency ratings will decrease with rank.

Hypothesis 2b: More frequent active transactional leadership behaviours by supervisors, as perceived by subordinates, will be more predictive of effective leadership outcomes amongst NCMs than amongst officers.

Ideal Leadership: Follower Preferences, Prototypes, and Expectations

"We must know much more about the hitherto nameless persons who comprise the followers of leaders if we are to develop adequate understanding of the reciprocal relationship" (Burns, 1978). From the preceding quote, it is evident that the architect of transformational leadership himself understood the importance of followers in the leadership process.

Nonetheless, the majority of transformational leadership research has focused on outcomes associated with transformational leadership and on transformational leaders themselves. Given that a major tenet of transformational leadership theory is the symbiotic effect transformational leaders and their followers have on one another (Howell & Shamir, 2005), it is surprising that very little research has focused on the followers of transformational leaders. Bass et al. (2006), too, concluded that future research needs to garner a better understanding of the dyadic relationship between leaders and followers in the context of transformational leadership.

In stark contrast to the leader-centric approach to leadership, Meindl (1985, 1995) presented a follower-centric view of leadership, which he coined the *romance of leadership*.

According to the romance of leadership notion, people hold a romantic, or heroic, view of leaders and associate unwarranted characteristics in them, such as prestige and charisma. In Meindl's view, however, leaders are irrelevant and interchangeable because charismatic leadership emerges as a result of social psychological forces operating among followers, rather than arising from the traits and behaviours of leaders. Leadership occurs out of followers' interpretations of leaders' personality and behaviours as opposed to their actual personality and behaviours. To this end, leaders and researchers do not define leadership, followers do. Although this radical notion has generally been dismissed for more *integrative* approaches that focus on the relationship between leaders' and followers' perceptions, traits, and behaviours in different contexts (Avolio, 2007; Bass et al., 2006; Hackman & Wageman, 2007; Vroom & Jago, 2007; Zaccaro, 2007), various researchers have sought to determine to what extent leadership is perceived by followers, and the impact their expectations, preferences, and prototypes have on outcomes. Some of these studies are summarized below.

Several researchers have examined how followers' leadership style *preferences* differ as a function of individual attributes and demographic characteristics. For example, Ehrhart and Klein (2001) found that attraction to a type of leader can, to some extent, be predicted on the basis of follower characteristics related to similarity attraction and need fulfillment. Individuals with strong worker participation values had a preference for charismatic leaders, and individuals with strong security work values preferred task-oriented leaders. They also found that 50% of their respondents preferred the relationship-oriented leader for whom they would like most to work, as compared with 30% for the charismatic leader and 20% for the task-oriented leader. Furthermore, they reported that followers differed in their perceptions and interpretations of

identical sets of leader behaviour. For example, a charismatic leader who is encouraging and energized to one follower may be deemed arrogant and overbearing to another.

Moss and Ngu (2006) examined whether personality traits influence followers' leadership style preference in the context of the FRL. Using a version of the Multifactor Leadership Questionnaire (MLQ) rater form adapted to measure leadership style preference, they reported that extraversion and conscientiousness coincided with favourable attitudes toward transformational leadership, and agreeableness and openness were negatively related to transactional leadership preference.

Finally, drawing from both gender differences and situational leadership theory, Vecchio and Boatwright (2002) examined how followers' gender and demographic differences associated with maturity (i.e., tenure, age, and education) would be associated with their preferences for leader structuring and leader considerateness. Although some of their findings supported their hypotheses, other results were somewhat counterintuitive. For example, consistent with their expectations, they found that preference for structure was lower for employees with greater levels of education and job tenure. As situational leadership theory would suggest, highly mature employees should resist or resent managerial attempts to deal with them in a structured or directive manner. Contrary to expectations, however, the third component of maturity (i.e., age) was positively related with preference for structure. Furthermore, preference for consideration was lower for employees with greater education than those with less education. Regarding gender differences, females preferred consideration over structure, but males did not demonstrate a style preference. Despite these inconclusive results and a lack of information surrounding the impact of preferences on outcomes, this study, and those described earlier, suggest that followers may differ in their preference for different types of leaders in a variety of ways.

According to Lord's leadership categorization theory (Lord, 1985; Lord, Foti, & DeVader, 1984) most people from the same culture have common implicit leadership theories (ILT), or leader *prototypes*, that fit the image of what a typical leader is like, and they use those prototypes to select and evaluate information about a particular leader. Just as leaders have implicit performance theories that guide their expectations of subordinate behaviour, so too do subordinates have implicit leadership theories against which their leaders are compared. If there is a fit between a leader's salient behaviours and perceived traits and the follower's prototype, the entire prototype is activated and that person is more likely to be considered a leader. Support for the role of prototypes on leader evaluation was provided by Engle and Lord (1997) who demonstrated that similarity between supervisors' and subordinates' ILT profiles predicted liking and the quality of leader-member exchanges (LMX), or leader-subordinate relationships.

More recently, Epitropaki and Martin (2005) demonstrated how followers' leader prototypes affect the quality of LMX and a number of outcomes. They compared employees' ideal ILT profiles to leaders' actual ILT profiles and found that the closer employees perceived their manager's ILT profile to be the ILTs they endorsed, the better the quality of LMX, which indirectly affected employee attitudes and well-being. Both of these studies suggest that certain outcomes can be negatively affected to the extent that leaders' attributes do not match employees' leader prototypes.

In the context of the FRL, using a *prototypicality* scale (Lord, Foti, & DeVader, 1984) that distinguished leaders from nonleaders, Bass and Avolio (1989) found that individuals' prototypes of leaders were more consistent with transformational leadership than with transactional leadership. The same results were revealed in the Global Leadership and Organizational Behavior Effectiveness (GLOBE) research program (Den Hartog et al., 1999)

whereby elements of transformational leadership were consistent with outstanding leadership prototypes in several different countries. Interestingly, though, in a follow-up to the GLOBE study, Den Hartog et al. found that peoples' implicit theories for what characterized outstanding "top managers" differed from those characterizing outstanding "lower level managers".

Respondents considered being innovative, visionary, persuasive, long-term oriented, diplomatic and courageous as more important for top-managers. The important characteristics associated with lower level managers were attention to subordinates, team building, and participative decision-making. These results suggest that people generally have different expectations of leaders at different hierarchical levels.

Two issues remain unclear, however. First, do members of the same organization have similar expectations of their leaders? And, second, within an organization, do lower level employees have different expectations of their leaders than do higher level employees? Accordingly, the second purpose of this study was to examine the extent to which followers' leader prototypes, or the type of leadership they expect from their leaders, were influenced by organizational norms or expectations and whether leader prototypes differed as a function of followers' hierarchical level. To do so, Canadian Forces members' *expectations* of their leaders were measured in the context of transformational and active transactional leadership. The term expectations was used here instead of preference or prototype in order to avoid ambiguity with regard to what follower perception was under investigation, and to more accurately reflect the contextual, as opposed to a more global, view of leadership studied here. Thus, to the extent that organizational requirements influence employees' expectations, I hypothesize the following:

Hypothesis 3a: Higher ranking members will expect more transformational leadership behaviours from their supervisors than lower ranking members.

Hypothesis 3b: Lower ranking members will expect more active transactional leadership behaviours from their supervisors than higher ranking members.

Follower-leader Congruence and its Effects

The final aspect of this study examined to what extent congruence between followers' expectations of their leaders and followers' perceptions of their leaders' actual behaviours affected outcomes associated with effective leadership. Research examining follower-leader congruence so far has taken a variety of forms and has resulted in mixed findings. One of the most dominant theories concerning the match between employees and their leaders has to do with person-supervisor fit (PS fit) – an aspect of person-environment fit (PE fit). The most researched forms of PS fit involve value congruence, goal congruence, and personality similarity between a subordinate and supervisor (Kristof-Brown, Zimmerman, & Johnson, 2005). Generally, these studies compare the same characteristics in both leaders and followers using the same measures, and then examine the degree to which they fit, or are congruent. In their recent meta-analysis, Kristof-Brown et al. demonstrated that PS fit had a relatively strong relationship with job satisfaction and supervisor satisfaction, and a moderate relationship with work performance.

More recently, researchers have examined how follower characteristics influence the effects of leadership (De Vries, Roe, & Taillieu, 2002; Epitropaki et al., 2005; Wofford, Whittington, & Goodwin, 2001). For example, De Vries et al. examined the moderating effects of followers' *need for leadership* on the relationship between leadership factors (i.e., support, inspirational skills, and structure) and five outcome variables. Some interaction effects were found, though the moderating effects were weak. In the case of the relationships between leader's inspirational skills and job satisfaction, leader's structure and organizational commitment, and

leader's support and work stress, a high need for leadership was associated with a stronger relationship between leadership and the outcome variable, and a low need for leadership with a weaker or nonexistent relationship. Although these findings compare favorably with other studies examining leadership congruence, the weak effects led the authors to conclude that there was not much evidence that the relationship between leadership factors and outcomes are moderated by subordinates' need for leadership.

To date, research exploring congruence between followers and their leaders in the context of transformational leadership has been limited to perceived similarity (e.g., Felfe & Schyns, 2004), value congruence (e.g., Jung & Avolio, 2000), and follower traits as moderators of transformational leadership effectiveness (Wofford et al., 2001). Felfe et al. studied the relationship between similarity in leadership behaviour and organizational outcomes. Specifically, they sought to determine if the degree of perceived similarity between followers' and leaders' leadership behaviour, as rated by followers, strengthened the relationship with leadership outcomes (i.e., extra effort, leader effectiveness, and satisfaction with the leader) and organizational outcomes (i.e., achievement orientation, stress, irritability). To do so, they measured followers' self-rated leadership and the perceived leadership of their leaders and, subsequently, organized participants into four groups based on similarity. For example, followers who rated both their own transformational leadership as low and their leaders' transformational leadership as high were placed in the *dissimilar high transformational leadership of leader* (DHTL) group. The three other groups were dissimilar low transformational leadership of leader (DSTL), similar high transformational leadership of leader (SHTL), and similar low transformational leadership of leader (SLTL). Felfe et al. expected the correlations between transformational leadership and outcomes to be ranked as follows, in order of strength: SHTL –

SLTL – DHTL – DLTl. Although stronger relationships were obtained for similarity, all of the correlations were low and insignificant for the organizational outcomes. For the leadership specific outcomes, however, their hypothesis was partly supported. All but one of the correlations between perceived transformational leadership similarity and the leader outcomes were significant. Furthermore, as expected, stronger relationships were found for the SHTL group, followed by the SLTL group. For the DHTL and DLTl groups, though, a reversed ranking was obtained on all three outcomes. Thus, although perceived similarity in transformational leadership positively affected leader specific outcomes, it appears that the effects of transformational leadership take a different form when leaders and followers are dissimilar.

Wofford et al. (2001) found that some followers are more susceptible to the efforts of a transformational leader than are other followers. In their study, they found that followers with a higher *growth need* rated transformational leaders as more effective and their own satisfaction as higher than followers who scored lower on growth need. Furthermore, followers with higher *autonomy needs* had stronger relationships between their perceptions of their leaders' transformational behaviours and these leaders' effectiveness than followers with lower autonomy needs. The authors concluded that transformational leadership is moderated by followers' motive patterns, and suggested that future research should study the extent that other personal attributes and contextual factors serve as moderators.

Though the results are mixed, and some aspects of fit appear more powerful than others, the results above suggest that congruence between followers and their leaders can affect the impact of leadership on outcomes. Bass (1990) suggests that conflict may arise as a result of differences in what members who are at different levels of the organization expect is appropriate

behaviour for them. Furthermore, Bass et al. (2006) suggest that followers have shared expectations about their leaders' characteristics and behaviour which influence their perceptions of their leaders' actions. Failure to meet expectations in one or more areas might lead followers to conclude that their leaders would fail to meet expectations in other areas. In that light, I propose the following hypothesis:

Hypothesis 4: Subordinates' rated expectations of their leaders will moderate the relationships between perceived transformational and active transactional leadership behaviours and effective leadership outcomes, such that the relationships will become stronger as the congruence between perceived leader behaviours and followers' expectations increases.

CHAPTER TWO: METHOD

Participants and Procedure

In conjunction with an ongoing Canadian Forces research project, the measures for this study were administered by Canadian Forces research officers to Canadian Forces members and Department of National Defence civilian employees over a one-year period beginning in the winter of 2006. All members and civilians participated voluntarily. The data were gathered by the Canadian Forces Directorate of Personnel Applied Research. Data from 1562 members stationed at thirteen units from four Army bases and three Air Force bases located in the provinces of Alberta, Ontario, and Nova Scotia were received. The response rates ranged from 35% to 98%, with an average rate of 62%. Data from two units ($n = 425$) were not used due to inconsistent and missing scales. Because military rank was the focal demographic variable of this study, data on all civilian employees ($n = 179$) and data where rank had not been identified ($n = 201$) were removed. Finally, an additional 53 cases were removed because they were missing more than 10% of their data. The final data set, then, consisted of a sub-sample of 704 officers and NCMs. The remaining missing data were handled with mean substitutions. Ethics approval for using these data were obtained from the University of Calgary and the Canadian Forces Directorate of Personnel Applied Research (see Appendices A and B).

The participating military members varied in rank, gender, age, level of education, number of years stationed at their current unit, and number of years of military service completed. Descriptive statistics on the participants can be found in Table 1. The majority of participants were male junior NCMs between the ages of 36 to 45 years, who had attained at least a high school diploma, had at least 16 years of military service, and had served at least one year at their current unit at the time the surveys were completed. Participants also varied in

Table 1

Demographic Group Frequencies and Percentages

	Demographic group	<i>n</i>	Percent ^a
Rank	Junior NCM	330	47%
	Senior NCM	202	29%
	Junior officer	143	20%
	Senior officer	29	4%
	Missing	0	
Gender	Male	514	82%
	Female	112	16%
	Missing	78	
Age	18-25 years	77	12%
	26-35 years	189	30%
	36-45 years	251	40%
	46 years or more	110	18%
	Missing	77	
Education	Some high school	26	5%
	High school	196	34%
	Some college or university	185	32%
	College or university	159	27%
	Postgraduate	14	2%
	Missing	124	
Time at unit	Less than 1 year	160	23%

	1 to 2 years	264	38%
	3 to 4 years	157	23%
	More than 4 years	113	16%
	Missing	10	
Years of service	5 years or less	82	12%
	6 to 15 years	157	22%
	16 to 25 years	347	50%
	26 years or more	115	16%
	Missing	3	

Note. $N = 704$. NCM is non-commissioned member. ^aValid percent estimate without missing data.

occupation and service element. However, these demographics were not measured by the military researchers and, therefore, cannot be reported herein.

Measures

The data were collected in conjunction with Canadian Forces research assessing organizational effectiveness using the Unit Morale Profile (UMP). The UMP is a survey, developed by the Canadian Forces Directorate of Personnel Applied Research, comprised of a variety of scales measuring organizational constructs deemed by the Canadian Forces to contribute to military unit effectiveness and operational readiness. The UMP is a tool used voluntarily by Commanding Officers to assess the attitudes and perceptions of members in their units.

Demographics. During the UMP data collection process, participants voluntarily reported on a number of demographic variables, such as gender, age, education level and years of service.

The demographic variable of interest in this study was rank, which was clustered into four groups: private to master-corporal, sergeant to chief warrant officer, officer cadet to captain, major to general. Note that for the ranks of major and above, differences existed between units in how they were clustered. For example, some units used a “major and above” cluster, whereas others stipulated “major to colonel”. This was likely because there were no generals in that particular population. The majors and above cluster and major to colonel cluster were combined to form one major to general, or senior officer, cluster. Even though the senior officer rank cluster may include generals, and generals are considered flag officers as opposed to senior officers, the term senior officer will be used here to describe the cluster of majors and above. As well, even though the term senior NCM is incorrect when referring to the rank of sergeants and above (senior non-commissioned officers and warrant officers is the correct term), for the sake of conceptual clarity, this study will refer to the sergeant to chief warrant officer rank cluster as senior NCMs. Accordingly, the four hierarchical levels examined in this study were, from the lowest to highest rank cluster, junior NCMs, senior NCMs, junior officers, and senior officers.

Leadership behaviours (perceived). The Canadian Forces uses a military version of the 36-item Multifactor Leadership Questionnaire (MLQ 5X-Short; Avolio, Bass, & Jung, 1995) rater form to assess the frequency of FRL behaviours amongst its leaders. For the purposes of the present study, the military version of the MLQ was adapted to measure followers’ perceptions of their immediate supervisors’ leadership behaviours, as well as followers’ expectations. By having members rate their immediate supervisors, problems associated with direct versus indirect leadership, such as those potentially affecting Kane et al.’s (2000) and Bass et al.’s (2003) results, were avoided because all of the followers in this sample reported directly to the leaders they rated. Due to copyright laws, the MLQ items cannot be reproduced in this document.

Table 2

Correlations Between Perceived Transformational Leadership Factors

Factor	1	2	3	4	5
1. Idealized influence attributed	-				
2. Idealized influence behaviour	.77*	-			
3. Inspirational motivation	.76*	.82*	-		
4. Intellectual stimulation	.78*	.77*	.75*	-	
5. Individualized consideration	.82*	.73*	.72*	.82*	-

* $p < .01$, one-tailed.

The version of the MLQ used in this study measured all five transformational leadership factors: idealized influence attributed (4 items), idealized influence behaviour (4 items), inspirational motivation (4-items), intellectual stimulation (4-items), and individualized consideration (4-items). It also measured the three transactional leadership factors: contingent reward (4-items), active management-by-exception (4-items), and passive management-by-exception (4-items). Finally, the MLQ measured laissez-faire leadership (4-items). In order to measure leadership behaviours, as perceived by subordinates (referred to as perceived leadership behaviours from here on), participants responded to “How often your immediate supervisor performs the behaviours described” on a 5-point Likert scale (where 1 = *never*, and 5 = *frequently, if not always*).

Prior to hypothesis testing, responses to the perceived leadership behaviour items were averaged as scale scores for each of the nine leadership factors. Zero-order correlations between the five transformational factors are provided in Table 2. As expected, and consistent with the

results of previous research, the five transformational factors were highly correlated ($r_s = .72$ to $.82$). A principal components analysis was conducted on the items making up those five factors to determine if they were well represented by a single higher-order transformational factor. With the Eigenvalue criteria set at greater than 1, one component was extracted accounting for 57% of the total variance. Accordingly, a higher-order transformational leadership factor was computed as the average of the responses to all 20 transformational items. Within this sample, the Cronbach's alpha for this 20-item scale was .96. Because the transactional factors are theoretically more independent, and because they were not highly correlated, the scale scores for contingent reward and active management-by-exception were analyzed separately. Because passive leadership was not examined in this study, the passive management-by-exception and laissez-faire scales were not analyzed. The Cronbach's alpha for the contingent reward scale was .84. In order to increase the internal consistency of the active management-by-exception scale, one item was removed. This item had been modified by Canadian Forces researchers to measure a behaviour that is more applicable to their research needs, though at the expense of that construct's integrity. The resulting Cronbach's alpha for the active management-by-exception scale was .57.

Leadership behaviours (expected). The leadership behaviours that participants expected of their supervisors were measured using the same items as for the perceived leadership behaviours described above. The difference was in the stem of the survey items. Participants replied to "How often you believe these behaviours should be performed by an immediate supervisor" on the same 5-point Likert scale used for the perceived leadership behaviours (where 1 = *never*, and 5 = *frequently, if not always*). Counterbalancing the perceived and expected leadership behaviour scales was not possible, so all participants rated their immediate

Table 3

Correlations Between Expected Transformational Leadership Factors

	1	2	3	4	5
1. Idealized influence attributed	-				
2. Idealized influence behaviour	.65*	-			
3. Inspirational motivation	.72*	.75*	-		
4. Intellectual stimulation	.57*	.62*	.64*	-	
5. Individualized consideration	.69*	.64*	.67*	.66*	-

* $p < .01$, one-tailed

supervisors' actual behaviours prior to rating their expectations.

As was done for the ratings of perceived leadership behaviours prior to hypothesis testing, responses to the expected leadership behaviour items were averaged as scale scores for each of the nine leadership factors. Zero-order correlations between those five transformational factors are provided in Table 3. Although the zero-order correlation coefficients were not as high as they were between the five perceived transformational leadership factors, the five expected transformational leadership factors were still strongly correlated ($rs = .57$ to $.75$). Therefore, a principal components analysis was conducted on those items to determine if they, too, were better represented by one higher-order transformational factor. With Eigenvalue criteria set at greater than 1, one component was extracted accounting for 41% of the total variance. Accordingly, a higher-order expected transformational leadership factor was computed as the average of the responses to all 20 transformational items. The Cronbach's alpha for this 20-item scale was .92. Although it did not affect the active management-by-exception scale's internal consistency, the same active management-by-exception scale item that was removed in the

perceived behaviour scale was removed in the expected behaviour scale in order to be consistent across scales. The Cronbach's alpha for the 3-item active management-by-exception scale was .59. The passive management-by-exception and laissez-faire scales were not analyzed.

Effective Leadership Outcomes. The UMP includes indicators of effective leadership that are consistent with those assessed in Judge et al.'s (2004) meta-analysis: *follower job satisfaction, satisfaction with the leader, leader effectiveness, and leader job performance.* Follower job satisfaction was measured using the UMP's 35-item Job Satisfaction scale, developed by Canadian Forces researchers (Bernard, 2004). It is designed to measure aspects of job satisfaction that are unique to the Canadian Forces (e.g., opportunities for promotion, satisfaction with training and equipment, etc.), as well as overall job satisfaction. The three items measuring overall job satisfaction were derived from the Job In General (JIG) scale (JIG; Ironson, Smith, Brannick, Gibson & Paul, 1989). Because these data were collected in conjunction with military research, participants responded to all 35 items. However, because only subordinates' overall job satisfaction was of interest, only the three JIG Scale items were analyzed for this study. They are, (1) "All in all I am satisfied with my job", (2) "In general, I don't like my job", and (3) "In general, I like working here". Overall job satisfaction was calculated as the average of the three items. The Cronbach's alpha for this three-item scale was .87.

Follower satisfaction with the leader, leader effectiveness, and leader performance were all measured directly with one item in the context of participants' immediate supervisor, and rated on a 5-point Likert scale. Another item deemed of practical importance to the military included in the UMP is *confidence in leadership*. Canadian Forces researchers have demonstrated that confidence in leadership is directly related to effectiveness, operational

readiness, and performance (Brown, 2004), and it has strong, negative relationships with a number of negative outcomes (Murphy & Farley, 1998). Specifically, on military operations, when subordinates have low levels of confidence in their leadership, there is an increase in the frequency of disciplinary problems, health issues, and early repatriation. For this study, followers' confidence in their immediate supervisor was measured directly with one item, rated on a 5-point Likert scale. In the UMP, all four items were presented on one scale under the heading "Confidence in Leadership". These items and their response scales are presented in Appendix C.

Prior to hypothesis testing, correlations between the items assessing follower job satisfaction, satisfaction with the immediate supervisor, immediate supervisor effectiveness, immediate supervisor performance, and confidence in the immediate supervisor were assessed to determine their relative distinctness. The zero-order correlations between the five effective leadership outcomes are presented in Table 4. With the exception of follower job satisfaction, all outcomes were highly correlated. Therefore, a principal components analysis was conducted to determine if satisfaction with the immediate supervisor, immediate supervisor effectiveness, immediate supervisor performance, and confidence in the immediate supervisor were better represented by one higher-order factor. With the Eigenvalue criteria set at greater than 1, one significant component was extracted accounting for 92% of the total variance. Accordingly, a higher-order factor related to followers' attitudes toward their leaders was computed as the average of the responses to those four scales. The Cronbach's alpha for this scale was .97. Because the follower job satisfaction scale is theoretically more independent, and because it was not highly correlated with the effective leadership outcomes, follower job satisfaction was retained as a separate construct in the tests of hypotheses. Accordingly, two indicators of

Table 4

Correlations Between Five Indicators of Effective Leadership

Variable	1	2	3	4	5
1. Follower job satisfaction	-				
2. Satisfaction with the supervisor	.34*	-			
3. Supervisor effectiveness	.34*	.89*	-		
4. Supervisor performance	.33*	.87*	.89*	-	
5. Confidence in the supervisor	.35*	.90*	.89*	.90*	-

* $p < .01$, one-tailed.

effective leadership were assessed in this study: follower job satisfaction and follower attitudes toward the supervisor. Means, standard deviations and intercorrelations for all variables used in the analyses are displayed in Table 5.

Table 5

Descriptive Statistics and Correlations for Variables Used in Hypothesis Testing

Variable	Mean	SD	1	2	3	4	5	6	7	8
1. Perceived T	3.28	.87	-							
2. Perceived CR	3.04	.97	.85**	-						
3. Perceived MBEA	2.96	.86	.08*	.09*	-					
4. Expected T	3.98	.52	.46**	.41**	.11**	-				
5. Expected CR	3.82	.66	.34**	.45**	.10**	.74**	-			
6. Expected MBEA	3.10	.88	.04	.07	.63**	.16**	.17**	-		
7. Job satisfaction	3.78	.94	.37**	.32**	-.03	.24**	.08*	-.05	-	
8. Attitudes toward the supervisor	3.86	1.01	.79**	.66**	-.02	.23**	.13**	-.05	.36**	-

Note. T is transformational leadership. CR is contingent reward leadership. MBEA is active management-by-exception leadership.

* $p < .05$, one-tailed). ** $p < .01$, one-tailed.

CHAPTER THREE: RESULTS

Between-rank Differences in Perceived Leadership Behaviour Frequencies

To examine between-rank differences in perceived leadership behaviour frequencies (Hypotheses 1a and 2a), one-way between-subjects analyses of variance (ANOVAs) were performed using perceived transformational leadership, perceived contingent reward leadership, and perceived active management-by-exception leadership as separate criterion variables. Descriptive statistics for the perceived transformational leadership behaviours of supervisors reported by rank cluster are presented in Table 6.

The omnibus ANOVA, [$F(3, 700) = 4.88, p = .002, \eta = .02$], for perceived transformational leadership was significant. With the Bonferroni correction applied to control for the family-wise error rate, producing a new alpha rate of .008, follow-up pairwise comparisons were performed to determine where the significant differences between groups existed. The means for perceived transformational leadership according to rank are depicted in Figure 1. Despite the increasing pattern of means from the lowest to highest ranks, only the difference between junior NCMs' ($M = 3.16$) and senior NCMs' ($M = 3.39$) mean observed levels of perceived transformational leadership was significant. Therefore, Hypothesis 1a, which proposed that subordinates' perceived transformational leadership behaviour frequency ratings will increase with rank, was partially supported.

Because Levine's test of homogeneity of variance was significant for actual contingent reward leadership, [$F(3,700) = 3.30, p = .02$], the Greenhouse-Geisser correction was applied to that variable. Neither the omnibus ANOVA for contingent reward leadership, [$F(1, 233) = 2.04, p = .11, \eta = .01$], nor the omnibus ANOVA for active management-by-exception leadership, [$F(3, 700) = 1.60, p = .188, \eta = .01$], were significant. Therefore, Hypothesis 2a, which proposed

that subordinates' perceived active transactional leadership behaviour frequency ratings will decrease with rank, was not supported.

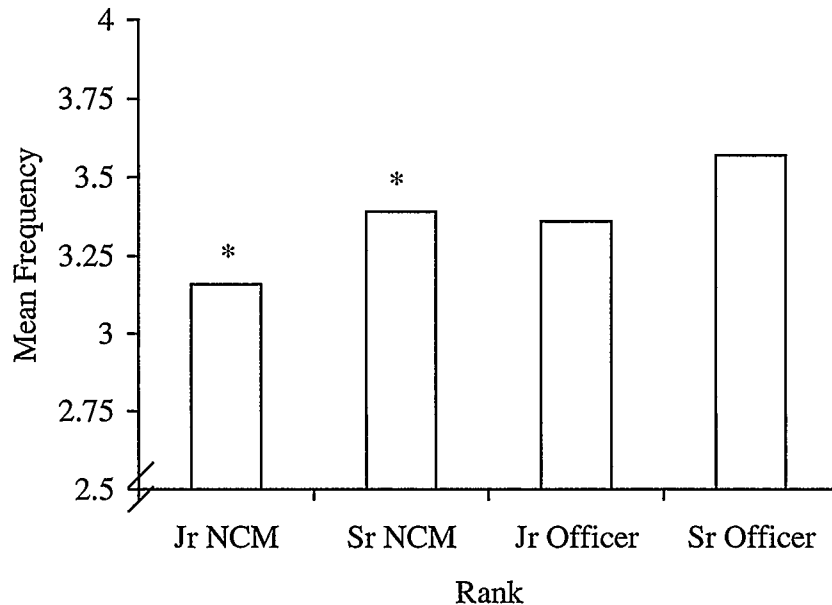
Table 6

Descriptive Statistics for Perceived Leadership Behaviour by Rank

Perceived behaviour	Rank	Mean	SD
Transformational	Junior NCMs	3.16	.89
	Senior NCMs	3.39	.87
	Junior officers	3.36	.78
	Senior officers	3.57	.79
	Combined	3.28	.87
Contingent reward	Junior NCMs	2.98	1.01
	Senior NCMs	3.15	1.00
	Junior officers	2.99	.85
	Senior officers	3.29	.85
	Combined	3.04	.97
MBE(A)	Junior NCMs	2.90	.85
	Senior NCMs	3.03	.89
	Junior officers	3.03	.84
	Senior officers	2.79	.82
	Combined	2.96	.86

Note. MBE(A) is active management-by-exception.

Figure 1

Perceived Transformational Leadership Behaviour Frequencies by Rank

Note. Jr is junior. Sr is senior. Rank is followers' rank.

* $p < .05$

Predictor and Criterion Variable Relationships by Rank

Hypothesis 1b examined the ability of transformational leadership to predict the two effective leadership outcomes at different levels of the military. To do so, the rank variable, representing the four rank clusters, was recoded into three effect-coded vectors. Next, three rank by transformational leadership interaction terms were created using each of the three rank vectors and the perceived transformational leadership variable. Hierarchical regression analyses were conducted for both criteria whereby actual transformational leadership was entered in Step 1, the three rank vectors were entered in Step 2, and the three interaction terms entered in Step 3. A significant ΔR^2 at Step 3 would reflect differences between ranks in the relationship between

transformational leadership and the criterion variable of interest. As depicted in Tables 7 and 8, neither the ΔR^2 at Step 3 for job satisfaction ($\Delta R^2 = .00, p = .62$) nor the ΔR^2 at Step 3 for attitudes toward the supervisor ($\Delta R^2 = .00, p = .65$) were significant, suggesting no significant interaction between ranks in the relationship between transformational leadership and 1) job satisfaction ($R = .37, p < .001$) or 2) attitudes toward the supervisor ($R = .79, p < .001$). Thus, Hypothesis 1b, which predicted that perceived transformational leadership would predict effective leadership outcomes at all rank levels, was supported.

Table 7

Hierarchical Regression Analysis Regressing Job Satisfaction on Perceived

Transformational Leadership

	<i>B</i>	<i>SE B</i>	β
Step 1			
Perceived transformational leadership	0.40	0.04	.37*
Step 2			
Perceived transformational leadership	0.40	0.04	.37*
Rank vector 1	-0.07	0.06	.04
Rank vector 2	0.03	0.07	.02
Rank vector 3	-0.04	0.07	-.02
Step 3			
Perceived transformational leadership	0.42	0.06	.39*
Rank vector 1	-0.09	0.26	-.06
Rank vector 2	0.33	0.28	.18
Rank vector 3	0.15	0.32	.07
Interaction 1	0.01	0.07	.03
Interaction 2	-0.09	0.08	-.17
Interaction 3	-0.05	0.09	-.09

Note. $N = 704$. $R^2 = .138$, $p < .001$ for Step 1; $\Delta R^2 = .002$, $p = .60$ for Step 2; $\Delta R^2 = .002$,

$p = .61$ for Step 3.

* $p < .001$.

Table 8

*Hierarchical Regression Analysis Regressing Attitudes Toward the Supervisor on
Perceived Transformational Leadership*

	<i>B</i>	<i>SE B</i>	β
Step 1			
Perceived transformational leadership	0.93	0.03	.79**
Step 2			
Perceived transformational leadership	0.94	0.03	.80**
Rank vector 1	0.14	0.04	.08*
Rank vector 2	0.05	0.05	.25
Rank vector 3	0.05	0.05	.02
Step 3			
Perceived transformational leadership	0.96	0.04	.83**
Rank vector 1	0.19	0.18	.11
Rank vector 2	0.22	0.20	.12
Rank vector 3	0.25	0.22	.12
Interaction 1	-0.01	0.05	-.02
Interaction 2	-0.05	0.06	-.09
Interaction 3	-0.06	0.06	-.10

Note. $N = 704$. $R^2 = .629$, $p < .001$ for Step 1; $\Delta R^2 = .006$, $p < .01$ for Step 2; $\Delta R^2 = .001$,

$p = .65$ for Step 3.

* $p < .01$. ** $p < .001$.

The same procedure described above was used to examine the ability of the two active transactional leadership styles to predict job satisfaction and also attitudes toward the supervisor at different levels of the military. As shown in Tables 9 and 10, for contingent reward leadership, neither the ΔR^2 at Step 3 for job satisfaction ($\Delta R^2 = .00, p = .89$) nor the ΔR^2 at Step 3 for attitudes toward the supervisor ($\Delta R^2 = .00, p = .72$) were significant, suggesting that the relationships between contingent reward leadership and 1) job satisfaction ($R = .32, p < .001$) and 2) attitudes toward the supervisor ($R = .66, p < .001$) do not differ between ranks. Therefore, Hypothesis 2b, which predicted that perceived contingent reward leadership would be more predictive of effective leadership among noncommissioned members, was not supported.

Table 9

Hierarchical Regression Analysis Regressing Job Satisfaction on Perceived Contingent Reward Leadership

	<i>B</i>	<i>SE B</i>	β
Step 1			
Perceived contingent reward leadership	0.31	0.04	.32*
Step 2			
Perceived contingent reward leadership	0.31	0.04	.32*
Rank vector 1	-0.11	0.06	-.07
Rank vector 2	0.03	0.07	.02
Rank vector 3	-0.00	0.07	-.00
Step 3			
Perceived contingent reward leadership	0.33	0.06	.34*
Rank vector 1	-0.01	0.22	-.01
Rank vector 2	0.14	0.24	.08
Rank vector 3	-0.13	0.28	-.07
Interaction 1	-0.03	0.07	-.07
Interaction 2	-0.04	0.07	-.07
Interaction 3	-0.04	0.09	.07

Note. $N = 704$. $R^2 = .104$, $p < .001$ for Step 1; $\Delta R^2 = .005$, $p = .25$ for Step 2; $\Delta R^2 = .001$, $p = .89$ for Step 3.

* $p < .001$.

Table 10

*Hierarchical Regression Analysis Regressing Attitudes Toward the Supervisor on**Perceived Contingent Reward Leadership*

	<i>B</i>	<i>SE B</i>	β
Step 1			
Perceived contingent reward leadership	0.69	0.03	.66*
Step 2			
Perceived contingent reward leadership	0.69	0.03	.66*
Rank vector 1	0.03	0.05	.01
Rank vector 2	0.04	0.06	.02
Rank vector 3	0.12	0.06	.05
Step 3			
Perceived contingent reward leadership	0.71	0.05	.68*
Rank vector 1	0.05	0.19	.03
Rank vector 2	0.20	0.21	.10
Rank vector 3	0.32	0.24	.15
Interaction 1	-0.01	0.06	-.01
Interaction 2	-0.05	0.06	-.08
Interaction 3	-0.06	0.07	-.09

Note. $N = 704$. $R^2 = .433$, $p < .001$ for Step 1; $\Delta R^2 = .003$, $p = .27$ for Step 2; $\Delta R^2 = .001$,

$p = .72$ for Step 3.

* $p < .001$.

Tables 11 and 12 show that, for perceived active management-by-exception leadership, neither the ΔR^2 at Step 3 in predicting job satisfaction ($\Delta R^2 = .01, p = .27$) nor the ΔR^2 at Step 3 in predicting attitudes toward the supervisor ($\Delta R^2 = .01, p = .34$) were significant. However, contrary to expectations, neither the R^2 at Step 1 for job satisfaction ($R^2 = .03, p = .39$) nor the R^2 at Step 1 for attitudes toward the supervisor ($R^2 = .00, p = .58$) were significant. Therefore, Hypothesis 2b was not supported in the context of active management-by-exception leadership. While perceived contingent reward leadership predicted both outcomes equally across all hierarchical levels, perceived active management-by-exception leadership did not predict either outcome at any rank level.

Table 11

*Hierarchical Regression Analysis Regressing Job Satisfaction on Perceived Active**Management-by-exception Leadership*

	<i>B</i>	<i>SE B</i>	β
Step 1			
Perceived active management-by-exception	-0.04	0.04	-.03
Step 2			
Perceived active management-by-exception	-0.04	0.04	-.04
Rank vector 1	-0.15	0.06	-.09
Rank vector 2	0.05	0.07	.03
Rank vector 3	-0.04	0.08	-.02
Step 3			
Perceived active management-by-exception	-0.09	0.06	-.09
Rank vector 1	-0.16	0.23	-.10
Rank vector 2	-0.14	0.25	-.08
Rank vector 3	-0.53	0.28	-.26
Interaction 1	0.01	0.08	.02
Interaction 2	0.07	0.08	.12
Interaction 3	0.17	0.09	.26

Note. $N = 704$. $R^2 = .001$, $p = .39$ for Step 1; $\Delta R^2 = .010$, $p = .07$ for Step 2; $\Delta R^2 = .006$, p

$= .27$ for Step 3.

Table 12

Hierarchical Regression Analysis Regressing Attitudes Toward the Supervisor on

Perceived Active Management-by-exception Leadership

	<i>B</i>	<i>SE B</i>	β
Step 1			
Perceived active management-by-exception	-0.03	0.04	-.02
Step 2			
Perceived active management-by-exception	-0.03	0.05	-.03
Rank vector 1	-0.06	0.07	-.03
Rank vector 2	0.07	0.08	.04
Rank vector 3	0.04	0.08	.02
Step 3			
Perceived active management-by-exception	-0.08	0.07	-.07
Rank vector 1	-0.10	0.25	-.06
Rank vector 2	-0.10	0.27	-.05
Rank vector 3	-0.46	0.30	-.21
Interaction 1	0.02	0.08	.03
Interaction 2	0.06	0.09	.10
Interaction 3	0.17	0.10	.25

Note. $N = 704$. $R^2 = .000$, $p = .58$ for Step 1; $\Delta R^2 = .003$, $p = .50$ for Step 2; $\Delta R^2 = .005$,

$p = .34$ for Step 3.

Due to the strong correlation between perceived transformational leadership and perceived contingent reward leadership, and because perceived contingent reward leadership demonstrated a pattern of relationships with the outcomes similar to those of perceived transformational leadership, albeit slightly weaker, follow-up analyses were completed in order to determine if: 1) the relationships between perceived transformational leadership and the outcomes were stronger than the relationships between perceived contingent reward leadership and the outcomes, and 2) if perceived transformational leadership would account for additional variance in the outcomes over and above that accounted for by perceived contingent reward leadership. These were not hypothesized specifically, but the findings thus far prompted this line of inquiry.

To assess the differential relationships between perceived transformational and contingent reward leadership on outcomes, t-tests were conducted in accordance with Glass and Hopkins' (1984) recommendations for testing differences between two dependent correlation coefficients. With predictor and criterion corrected for unreliability, the relationship between transformational leadership and job satisfaction ($r = .41$) was significantly stronger than the corrected relationship between contingent reward leadership and job satisfaction ($r = .37$), [$t(701) = 3.70, p < .001$]. Similarly, corrected for unreliability, the relationship between transformational leadership and attitudes toward the supervisor ($r = .82$) was significantly stronger than the corrected relationship between contingent reward leadership and attitudes toward the supervisor ($r = .73$), [$t(701) = 13.15, p < .001$]. These results suggest that, in this military sample, perceived transformational leadership was a better predictor of job satisfaction and attitudes toward the supervisor than perceived contingent reward leadership.

Hierarchical regression analyses were conducted for both criterion variables whereby perceived contingent reward leadership was entered in Step 1 and perceived transformational leadership was entered in Step 2. The results of the hierarchical regression analyses are presented in Tables 13 and 14. Perceived transformational leadership accounted for an additional 3% ($p < .001$) of the variance in job satisfaction, and an additional 20% ($p < .001$) of the variance in attitudes toward the supervisor, both of which are statistically significant. That transformational leadership augmented the effects of contingent reward leadership on job satisfaction and attitudes toward the supervisor are consistent with other reports (Kane et al., 2000; Waldman et al., 1990) regarding the augmenting effects of transformational leadership on outcomes in military samples.

Table 13

Hierarchical Regression Analysis Regressing Job Satisfaction on Perceived Transformational Leadership after Contingent Reward Leadership

	<i>B</i>	<i>SE B</i>	β
Step 1			
Perceived contingent reward leadership	0.31	0.04	.32*
Step 2			
Perceived contingent reward leadership	0.03	0.06	.03
Perceived transformational leadership	0.38	0.07	.35*

Note. $N = 704$. $R^2 = .104$, $p < .001$ for Step 1; $\Delta R^2 = .034$, $p < .001$ for Step 2.

* $p < .001$

Table 14

Hierarchical Regression Analysis Regressing Attitudes Toward the Supervisor on

Perceived Transformational Leadership after Contingent Reward Leadership

	<i>B</i>	<i>SE B</i>	β
Step 1			
Perceived contingent reward leadership	0.69	0.03	.66*
Step 2			
Perceived contingent reward leadership	-0.05	0.05	-.05
Perceived transformational leadership	0.98	0.05	.84*

Note. $N = 704$. $R^2 = .433$, $p < .001$ for Step 1; $\Delta R^2 = .196$, $p < .001$ for Step 2.

* $p < .001$

Between-rank Differences in Expected Leadership Behaviour Frequencies

Descriptive statistics for the leadership behaviours that followers expected of their supervisors are displayed in Table 15 by rank. To examine between-rank differences in followers' transformational leadership expectations (Hypothesis 3a), a one-way between-subjects ANOVA was conducted on followers' expected transformational leadership ratings. The omnibus ANOVA, [$F(3, 700) = 5.09$, $p = .002$, $\eta = .02$], for expected transformational leadership was significant. With the Bonferroni correction applied, producing a new alpha rate of .008, follow-up pairwise comparisons were performed to determine significant differences between groups. The means for expected transformational leadership according to rank are depicted in Figure 2. Despite an increasing pattern of means, only the difference between junior NCMs' ($M = 3.92$) and senior officers' ($M = 4.26$) mean expectations, and the difference between senior NCMs' ($M = 3.99$) and senior officers' mean ($M = 4.26$) expectations, were significant. Therefore,

Hypothesis 3a, which stated that higher ranking members would expect more transformational leadership from their superiors than lower ranking members, was partially supported.

Table 15

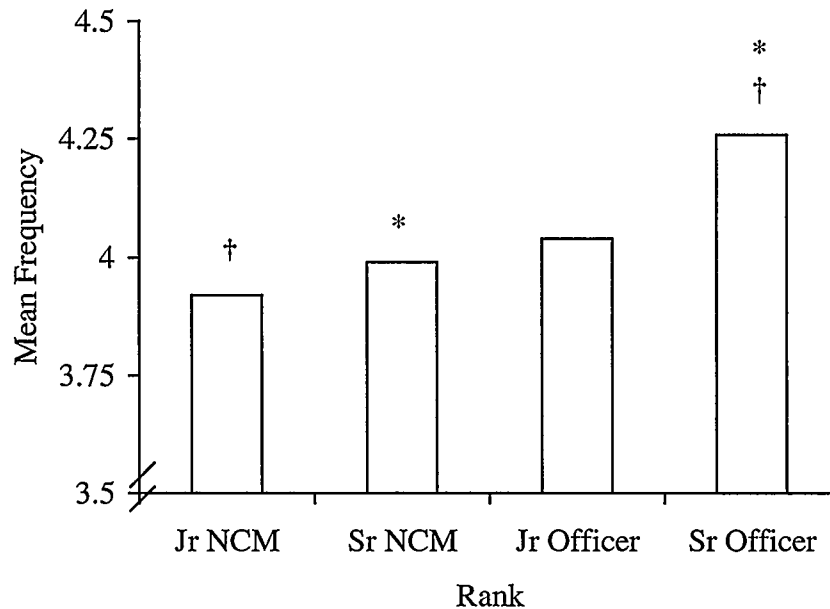
Descriptive Statistics for Expected Leadership Behaviour by Rank

Expected behaviour	Rank	Mean	SD
Transformational	Junior NCMs	3.92	.55
	Senior NCMs	3.99	.48
	Junior officers	4.04	.50
	Senior officers	4.26	.40
	Combined	3.98	.52
Contingent reward	Junior NCMs	3.83	.69
	Senior NCMs	3.80	.65
	Junior officers	3.78	.60
	Senior officers	4.07	.57
	Combined	3.82	.65
MBE(A)	Junior NCMs	3.04	.86
	Senior NCMs	3.15	.89
	Junior officers	3.20	.90
	Senior officers	2.86	.88
	Combined	3.10	.88

Note. MBE(A) is active management-by-exception. Rank is followers' rank.

Figure 2

Expected Transformational Leadership Behaviour Frequencies by Rank



Note. Jr is junior. Sr is senior. Rank is followers' rank.

* $p < .05$. † $p < .01$.

To assess between-rank differences in followers' active transactional leadership expectations (Hypothesis 3b), one-way ANOVAs were performed using followers' expected contingent reward leadership ratings and expected active management-by-exception ratings as separate criterion variables. Neither the omnibus ANOVA for contingent reward leadership, [$F(3, 700) = 1.64, p = .180, \eta = .01$], nor the omnibus ANOVA for active management-by-exception leadership, [$F(3, 700) = 2.13, p = .096, \eta = .01$], were significant. Therefore, Hypothesis 3b, proposing that members' expectations for active transactional leadership behaviours by their superiors would decrease with rank, was not supported.

Perceived vs. Expected Leadership Behaviour Congruence Effects

In accordance with Edwards' (1994) recommendations, congruence effects (Hypothesis 4) were assessed using hierarchical multiple regression, where the interaction term was entered in a subsequent step after the main effects. A significant ΔR^2 at Step 2 would suggest that congruence between one's supervisor's leadership and one's expectations has a meaningful effect on the outcome. In order to reduce potential problems associated with multicollinearity, the main effects and interaction term created from them were centred prior to entering them into the hierarchical regression analysis. The results of the hierarchical regression analyses are presented in Tables 16-21.

For transformational leadership, neither the ΔR^2 at Step 2 for job satisfaction ($\Delta R^2 = .00$, $p = .94$) nor the ΔR^2 at Step 2 for attitudes toward the supervisor ($\Delta R^2 = .00$, $p = .21$) were significant. Neither the ΔR^2 at Step 2 for job satisfaction ($\Delta R^2 = .00$, $p = .90$) nor the ΔR^2 at Step 2 for attitudes toward the supervisor ($\Delta R^2 = .00$, $p = .77$) were significant for contingent reward leadership either. Interestingly, for active management-by-exception, both the ΔR^2 at Step 2 for job satisfaction ($\Delta R^2 = .04$, $p < .001$) and the ΔR^2 at Step 2 for attitudes toward the supervisor ($\Delta R^2 = .11$, $p < .001$) were significant, despite non-significant R^2 values at Step 1.

Table 16

*Hierarchical Regression Analysis for Perceived vs. Expected Transformational**Leadership Behaviour Congruence Effects on Job Satisfaction*

	<i>B</i>	<i>SE B</i>	β
Step 1			
Perceived transformational leadership	0.36	0.04	.33**
Expected transformational leadership	0.17	0.07	.09*
Step 2			
Perceived transformational leadership	0.36	0.04	.33**
Expected transformational leadership	0.17	0.08	.09*
Perceived x expected transformational leadership interaction	0.01	0.07	.00

Note. $N = 704$. $R^2 = .145$, $p < .001$ for Step 1; $\Delta R^2 = .000$, $p = .94$ for Step 2.

* $p < .05$. ** $p < .001$.

Table 17

*Hierarchical Regression Analysis for Perceived vs. Expected Transformational
Leadership Behaviour Congruence Effects on Attitudes Toward the Supervisor*

	<i>B</i>	<i>SE B</i>	β
Step 1			
Perceived transformational leadership	1.01	0.03	.87*
Expected transformational leadership	-0.32	0.05	-.16*
Step 2			
Perceived transformational leadership	1.02	0.03	.88*
Expected transformational leadership	-0.34	0.05	-.17*
Perceived x expected transformational leadership interaction	-0.06	0.05	-.03

Note. $N = 704$. $R^2 = .650$, $p < .001$ for Step 1; $\Delta R^2 = .001$, $p = .21$ for Step 2.

* $p < .001$.

Table 18

*Hierarchical Regression Analysis for Perceived vs. Expected Contingent Reward**Leadership Behaviour Congruence Effects on Job Satisfaction*

	<i>B</i>	<i>SE B</i>	β
Step 1			
Perceived contingent reward leadership	0.35	0.04	.36*
Expected contingent reward leadership	-0.11	0.06	-.07
Step 2			
Perceived contingent reward leadership	0.34	0.04	.35*
Expected contingent reward leadership	-0.11	0.06	-.07
Perceived x expected contingent reward leadership interaction	0.01	0.05	.01

Note. $N = 704$. $R^2 = .108$, $p < .001$ for Step 1; $\Delta R^2 = .000$, $p = .90$ for Step 2.

* $p < .001$.

Table 19

*Hierarchical Regression Analysis for Perceived vs. Expected Contingent Reward**Leadership Behaviour Congruence Effects on Attitudes Toward the Supervisor*

	<i>B</i>	<i>SE B</i>	β
Step 1			
Perceived contingent reward leadership	0.78	0.03	.75*
Expected contingent reward leadership	-0.33	0.05	-.21*
Step 2			
Perceived contingent reward leadership	0.79	0.03	.76*
Expected contingent reward leadership	-0.33	0.05	-.21*
Perceived x expected contingent reward leadership interaction	-0.01	0.04	-.01

Note. $N = 704$. $R^2 = .468$, $p < .001$ for Step 1; $\Delta R^2 = .000$, $p = .77$ for Step 2.

* $p < .001$.

Table 20

Hierarchical Regression Analysis for Perceived vs. Expected Active Management-by-exception Leadership Behaviour Congruence Effects on Job Satisfaction

	<i>B</i>	<i>SE B</i>	β
Step 1			
Perceived MBEA leadership	-0.00	0.05	-.00
Expected MBEA leadership	-0.05	0.05	-.05
Step 2			
Perceived MBEA leadership	-0.02	0.05	-.02
Expected MBEA leadership	-0.02	0.05	-.02
Perceived x expected MBEA leadership interaction	0.22	0.04	.21*

Note. $N = 704$. MBEA is active management by exception. $R^2 = .002$, $p = .44$ for Step 1;

$\Delta R^2 = .044$, $p < .001$ for Step 2.

* $p < .001$.

Table 21

Hierarchical Regression Analysis for Perceived vs. Expected Active Management-by-exception Leadership Behaviour Congruence Effects on Attitudes Toward the Supervisor

	<i>B</i>	<i>SE B</i>	β
Step 1			
Perceived MBEA leadership	0.02	0.06	.02
Expected MBEA leadership	-0.07	0.06	-.06
Step 2			
Perceived MBEA leadership	-0.00	0.05	-.00
Expected MBEA leadership	-0.01	0.05	-.01
Perceived x expected MBEA leadership interaction	0.38	0.04	.34*

Note. $N = 704$. MBEA is active management-by-exception. $R^2 = .003$, $p = .41$ for Step 1;

$\Delta R^2 = .113$, $p < .001$ for Step 2.

* $p < .001$.

In order to interpret the significant interactions, simple regressions, using perceived active management-by-exception and the two criterion variables, were performed separately for those with low active management-by-exception leadership expectations and for those with high active management-by-exception leadership expectations. In accordance with Aiken and West's (1991) suggestions for interpreting interactions, the low active management-by-exception leadership expectations group ($n = 108$) was composed of those who scored one standard deviation or more below the mean expected active management-by-exception leadership score, and the high active management-by-exception expectations group ($n = 152$) was composed of those who scored one standard deviation or more above the mean.

The results of the regression analyses are summarized in Tables 22 and 23, and the interactions are depicted in Figures 3 and 4. For those with low expectations for active management-by-exception leadership, perceived active management-by-exception leadership had significant negative correlations with job satisfaction ($r = -.30$), [$F(1, 106) = 10.612, p = .002$], and follower attitudes toward the supervisor ($r = -.42$), [$F(1, 106) = 22.297, p < .001$]. For those with high expectations for active management-by-exception leadership, perceived active management-by-exception leadership had significant positive correlations with job satisfaction ($r = .33$), [$F(1, 150) = 18.133, p < .001$], and follower attitudes toward the supervisor ($r = .57$), [$F(1, 150) = 70.955, p < .001$]. Whereas non-significant relationships between active management-by-exception leadership and the outcomes were found among the total sample and across all four rank clusters, these significant interactions suggest that active-management-by-exception leadership performed by supervisors can have either positive or negative effects on certain outcomes, depending on whether or not followers expect those behaviours from their supervisors. When followers with low expectations for active management-by-exception

Table 22

Regression Analyses for Perceived Active Management-by-exception Leadership Effects on Job Satisfaction for Low and High Expectations Groups

	<i>B</i>	<i>SE B</i>	β
Low MBEA Leadership Expectations			
Perceived MBEA leadership	-0.40	0.12	-.30*
High MBEA Leadership Expectations			
Perceived MBEA leadership	0.42	0.10	.33**

Note. *n* low expectations = 108. *n* high expectations = 152. MBEA is active management-by-exception.

* $p < .01$. ** $p < .001$.

Table 23

Regression Analyses for Perceived Active Management-by-exception Leadership Effects on Attitudes Toward the Supervisor for Low and High Expectations Groups

	<i>B</i>	<i>SE B</i>	β
Low MBEA Leadership Expectations			
Perceived MBEA leadership	-0.58	0.12	-.42*
High MBEA Leadership Expectations			
Perceived MBEA leadership	0.75	0.89	.57*

Note. *n* low expectations = 108. *n* high expectations = 152. MBEA is active management-by-exception.

* $p < .001$.

leadership perceive to be subjected to it by their supervisors, their job satisfaction and attitudes toward their supervisors are adversely affected. Conversely, when followers with high expectations for that style of leadership perceive to be subjected to it from their supervisors, their job satisfaction and attitudes toward their supervisors are positively affected.

Hypothesis 4, therefore, which proposed that subordinates' expectations of their leaders would moderate the relationships between perceived leadership behaviours and effective leadership outcomes, was partially supported. Although followers' expectations did not moderate the effects of perceived transformational leadership and contingent reward leadership on outcomes, their expectations did moderate the effects of perceived management-by-exception leadership on both job satisfaction and attitudes toward the supervisor.

Figure 3

Moderating Effect of Follower Expectations on the Relationship Between Perceived Active Management-by-exception Leadership and Job Satisfaction

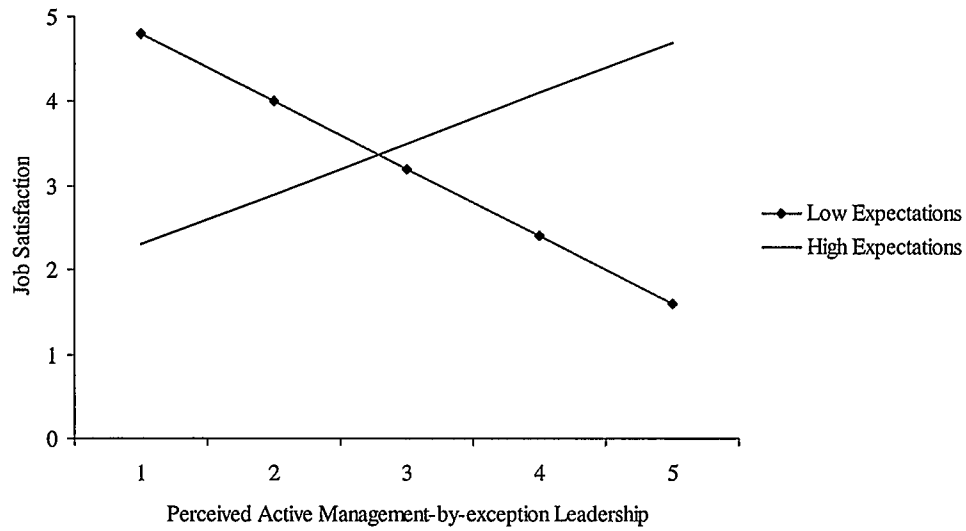
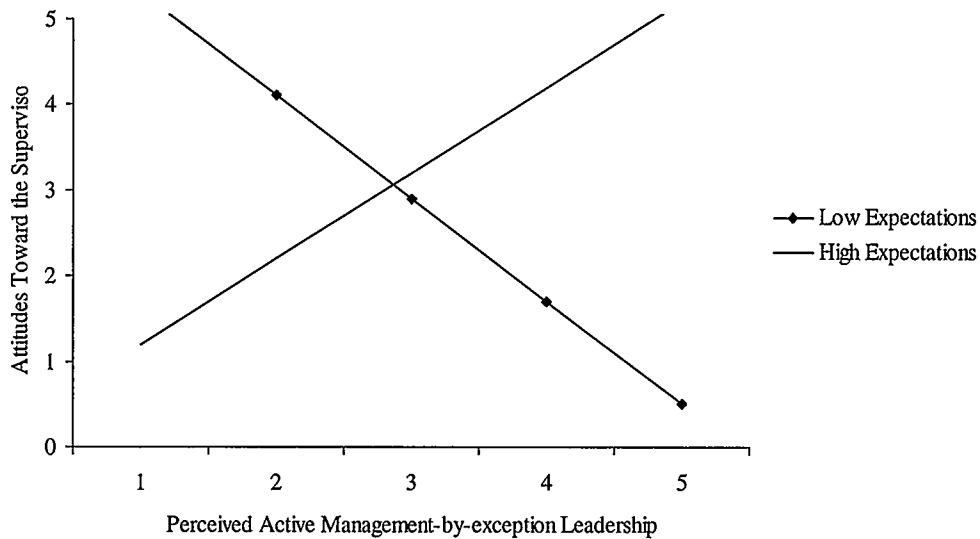


Figure 4

Moderating Effect of Follower Expectations on the Relationship Between Perceived Active Management-by-exception Leadership and Attitudes Toward the Supervisor



The demographic frequencies and percentages for the low and high active-management-by-exception groups are presented in Table 24. The groups did not appear to differ according to level of rank, age, education, time at unit, or years of service. However, the ratio of males to females among those who have high active management-by-exception leadership expectations (119 males: 17 females) was higher than the ratio of males to females who have low expectations for active management-by-exception leadership (72 males: 27 females), [$\chi^2(1) = 8.22, p < .005$]. The gender ratio difference between those with low and high expectations, along with the moderating effect of follower expectations, suggested that the effects of perceived active management-by-exception leadership might differ as a function of gender.

Although gender differences in the relationship between perceived active management-by-exception leadership and the outcomes were not hypothesized, this possibility was investigated by performing simple regression analyses, whereby the outcomes were regressed on perceived active management-by-exception leadership separately for males and females. The results of those analyses are presented in Tables 25 and 26. Perceived active management-by-exception leadership did not predict job satisfaction among males, [$F(1, 512) = 0.53, p = .47$], or females, [$F(1, 110) = 0.21, p = .65$]. However, whereas perceived active management-by-exception leadership did not predict attitudes toward the supervisor among males, [$F(1, 512) = 0.17, p = .68$], for females, it was significantly negatively correlated with attitudes toward the supervisor ($r = -.22$), [$F(1, 110) = 5.61, p = .02$]. This unpredicted finding suggests that female followers, in particular, are adversely affected by active management-by-exception leadership.

Table 24

Demographic Group Frequencies and Percentages for those with Low and High

Expectations for Active management-by-exception Leadership

Demographic group	Low MBE(A) Expectations		High MBE(A) Expectations	
	<i>n</i>	Percent ^a	<i>n</i>	Percent ^a
Rank				
Junior NCM	54	50	62	41
Senior NCM	29	27	50	33
Junior officer	20	18	36	24
Senior officer	5	5	4	2
Missing	0		0	
Gender				
Male	72	73	119	88
Female	27	27	17	12
Missing	9		16	
Age				
18-25 years	12	12	18	13
26-35 years	26	27	45	33
36-45 years	47	47	44	32
46 years or more	14	14	30	22
Missing	9		15	
Education				
Some high school	2	2	5	3

High school	27	32	40	32
Some college or university	28	34	40	32
College or university	25	30	40	32
Postgraduate	2	2	2	1
Missing	24		25	
Time at unit				
Less than 1 year	32	31	38	25
1 to 2 years	34	32	55	36
3 to 4 years	21	20	31	21
More than 4 years	18	17	27	18
Missing	3		1	
Years of service				
5 years or less	15	14	20	13
6 to 15 years	22	20	37	25
16 to 25 years	55	51	68	45
26 years or more	16	15	26	17
Missing	0		1	

Note. *n* for low expectations group is 108. *n* for high expectations group is 152. NCM is

non-commissioned member. ^aValid percent estimate without missing data.

Table 25

Regression Analyses for Perceived Active Management-by-exception Leadership Effects on Job Satisfaction for Males and Females

	<i>B</i>	<i>SE B</i>	β
Males			
Perceived MBEA leadership	-0.04	0.05	-.03
Females			
Perceived MBEA leadership	0.04	0.09	.04

Note. *n* males = 514. *n* females = 112. MBEA is active management-by-exception.

Table 26

Regression Analyses for Perceived Active Management-by-exception Leadership Effects on Attitudes Toward the Supervisor for Males and Females

	<i>B</i>	<i>SE B</i>	β
Males			
Perceived MBEA leadership	-0.02	0.05	-.02
Females			
Perceived MBEA leadership	-0.25	0.11	-.22*

Note. *n* males = 514. *n* females = 112. MBEA is active management-by-exception.

* $p < .05$.

CHAPTER FOUR: DISCUSSION

One of the purposes of this study was to examine the manifestation and effects of transformational leadership, contingent reward leadership, and active management-by-exception leadership across all hierarchical levels of the military. Although researchers have studied the effects of transformational leadership and contingent reward leadership in military settings, no study has examined the differential effects of each leadership style across all hierarchical levels of the military, including junior and senior noncommissioned leaders.

This study examined the frequencies and effects of transformational leadership and the two active transactional leadership styles across four Canadian Forces rank clusters. Furthermore, although leadership researchers have examined followers' implicit leadership theories and leadership style preferences, no study has examined followers' expectations of their leaders at different levels of the military, nor the moderating effect of followers' expectations on outcomes. In addition to followers' ratings of their supervisors' leadership behaviours, this study measured followers' expectations for transformational leadership and the two active transactional leadership styles across four rank clusters, and investigated whether followers' expectations of their leaders moderated the relationships between supervisors' leadership behaviours, as perceived by subordinates, and two outcomes associated with effective leadership: follower job satisfaction and follower attitudes toward the supervisor.

The Manifestation and Effects of Transformational Leadership

Based on past findings among officer samples suggesting that the reported frequencies of transformational leadership behaviours increase with rank, it was expected that the perceived frequencies of transformational leadership behaviours by supervisors would increase with rank in this sample too (Hypothesis 1a). This hypothesis was partially supported. Although the mean

frequencies generally increased with rank, only the difference between junior NCMs and senior NCMs was significant. This suggests that the supervisors of senior NCMs perform transformational leadership behaviours at a higher rate than the supervisors of junior NCMs. However, because only 2% of the variance in perceived transformational leadership could be attributed to differences across ranks, the importance of such a difference is questionable.

Although this is the first study to report differences among NCMs, the results of this study are inconsistent with other findings (e.g., Kane et al., 2000) to the extent that differences in the frequency of transformational leadership behaviours reported by senior officers was not greater than the frequency of transformational leadership behaviours reported by junior officers. As expected, the lowest ranking group, the junior NCMs, reported the lowest frequency of transformational leadership. However, the mean frequency for that group was still moderately high and not much lower than the combined group mean, suggesting that transformational leadership behaviours are performed at moderately high frequencies by Canadian Forces leaders at all levels.

As hypothesized (Hypothesis 1b), transformational leadership significantly predicted both indicators of effective leadership among all four rank clusters. Despite the difference in the frequency of transformational leadership reported by junior and senior NCMs, there were no significant differences between the four rank clusters in those relationships, suggesting that transformational leadership behaviours performed by the lowest ranking supervisors positively affects their followers' job satisfaction and their attitudes toward their supervisors as much as transformational leadership behaviours performed by the highest ranking supervisors. Although consistent with Judge et al.'s (2004) meta-analytic results, these results are inconsistent with past research using military samples that has suggested that the effects of transformational leadership

become more positive as rank increases (Atwater et al., 1996; Bass et al., 2003; Kane et al., 2000). A possible explanation for the difference found here is that this sample of military members are from an organization whose leadership doctrine fosters transformational leadership at all levels of the organization, as opposed to organizations that may reserve transformational leadership training and reinforcement at higher ranking levels. Unlike many other large organizations, the Canadian Forces recognizes the value of transformational leadership and encourages those behaviours at all levels, including its junior noncommissioned leaders. Another possible reason for the difference reported here is that this study focused on direct supervision only, as opposed to incorporating indirect leader evaluations. Consequently, these results may be a truer indication of the effects of transformational supervision, as opposed to the effects of similarity or indirect leadership that may have confounded past findings (i.e., Kane et al., 2000; Yammarino et al., 1990).

The Manifestation and Effects of Active Transactional Leadership

Contrary to expectations (Hypothesis 2a), perceived frequencies of active transactional leadership did not differ according to rank, despite a prominent call for those behaviours among NCMs in the Canadian Forces Performance Appraisal System's performance requirements. This suggests that the supervisors of junior and senior NCMs are performing contingent reward leadership behaviours and active management-by-exception leadership behaviours at rates comparable to junior and senior officers. This finding is particularly interesting given the difference in frequency of transformational leadership behaviours between junior and senior NCMs. Whereas transformational leadership, which is generally deemed more stable across conditions than transactional leadership, differed as a function of rank, at least among NCMs, contingent reward and active management-by-exception leadership behaviours did not. With all

four rank clusters combined, the mean frequency of contingent reward leadership behaviours was lower than the combined mean frequency of transformational leadership behaviours. Though lower than the frequencies for both transformational and contingent reward leadership behaviours, the mean perceived frequency of active management-by-exception leadership behaviours was still moderate.

Although it was expected that the two active transactional styles would be more predictive of outcomes among NCMs than among officers (Hypothesis 2b), they did not differentially predict follower job satisfaction or follower attitudes toward the supervisor across rank levels. Contingent reward leadership performed by lower ranking supervisors predicted both outcomes as well as that performed by higher ranking supervisors. Although perceived contingent reward leadership was a strong predictor of both follower job satisfaction and follower attitudes toward the supervisor, it did not predict either outcome as strongly as did transformational leadership. Nonetheless, the strength of the relationships between contingent reward leadership and the outcomes, especially among the officers, is interesting when compared to Boyd's ((1988), as reported by Bass, 1997) results which reported that senior Canadian Forces officers did not associate transactional leadership with effective leadership.

Consistent with past research using military participants (e.g., Kane et al., 2000; Waldman et al., 1990), transformational leadership predicted both outcomes over and above contingent reward leadership. Specifically, transformational leadership accounted for an additional 3% of the variance in follower job satisfaction, and an additional 20% of the variance in follower attitudes toward the supervisor, beyond that accounted for by contingent reward leadership. Before follower expectations were accounted for, active management-by-exception leadership did not predict either outcome at any rank level.

Follower Expectations

Consistent with expectations, there were significant differences between the rank clusters in followers' transformational leader expectations (Hypothesis 3a). Specifically, senior officers expected more transformational leadership from their supervisors than both junior noncommissioned members and senior noncommissioned members. As with perceived transformational leadership, the effect size was small, indicating that rank differences only accounted for 2% of the variance in transformational leadership expectations. Contrary to what was predicted (Hypothesis 3b), the difference between senior and junior officers' expectations for transformational leadership was not significant. Overall, Canadian Forces members in this sample expected a relatively high frequency of transformational leadership behaviours from their supervisors.

Followers' expectations for contingent reward leadership and active management-by-exception leadership did not differ according to rank. Although lower than the combined mean frequency expected of transformational leadership, Canadian Forces members expected a moderately high frequency of contingent reward leadership behaviours from their supervisors. Surprisingly, despite its lack of positive effect on outcomes, members reported that they expected a moderate amount of active management-by-exception leadership behaviours from their supervisors.

Contrary to expectations (Hypothesis 4), subordinates' expectations did not moderate the effects of transformational leadership nor contingent reward leadership on either outcome. The lack of variability in people's expectations for transformational and contingent reward leadership lends support to Bass et al.'s (1985) notion that those two styles of leadership are consistent with people's leader prototypes. Consistent with expectations, however, follower expectations did

moderate the effects of perceived active management-by-exception leadership on both job satisfaction and attitudes toward the supervisor. This suggests that active management-by-exception was generally neither an effective nor ineffective style of leadership unless, however, followers had either low or high expectations for it. Whereas followers who did not expect active management-by-exception leadership but perceived to be subjected to it by their supervisors were adversely affected, followers who expected active management-by-exception leadership and reportedly received it from their supervisors were more satisfied in their jobs and had better attitudes toward their supervisors. The implications of this finding are discussed below.

Theoretical Implications

The findings reported here have several theoretical implications. First, despite the significant difference between the two noncommissioned groups, the mean frequencies of transformational leadership among those groups were still high. Furthermore, transformational leadership predicted follower job satisfaction and attitudes toward the supervisor equally well across all four hierarchical levels. These findings do not support pure situational theories of leadership which advocate adapting styles of leadership to the situation, because, not only were the two most effective leadership styles displayed at comparable rates across situations (i.e., hierarchical level), they were equally effective across levels. These results do support Bass' (1985) notion that, although leaders can be more or less transformational, transformational leadership applies to, and can be effective at, all levels of the organization.

A second theoretical implication has to do with the attitudes toward the supervisor outcome examined here. Both transformational leadership and contingent reward leadership were both very strong predictors of follower attitudes toward the supervisor. Recall that this construct was originally meant to consist of four separate constructs widely used in past research as

indicators of effective leadership; follower job satisfaction, satisfaction with the leader, leader effectiveness, and leader job performance. The results of this study suggest that researchers may want to reconsider measuring these constructs separately. At least when two or more of these constructs are being measured subjectively using followers' perceptions, using a higher-order *attitude toward the leader* construct may be more appropriate, and may be more effective at tapping into effective leadership from a followers perspective.

The finding that followers' expectations moderated the effects of active management-by-exception leadership is particularly interesting for two reasons. First, these results add more insight into the contextual nature of active management-by-exception leadership by demonstrating the conditions whereby it has a substantial impact on outcomes. As a full range of leadership factor that falls along the middle of the FRL effectiveness continuum, it is a factor that is generally neither effective nor ineffective (Avolio et al., 1995, Judge et al., 2004). Despite some suggestions as to the conditions whereby active management-by-exception leadership may be required, it tends to produce weak or non-significant relationships with outcomes. These results, on the contrary, indicate that when followers do not expect active management-by-exception from their supervisors, based on their own implicit beliefs about the types of behaviours their leaders should be performing, but they are subjected to it, their job satisfaction and their attitudes toward their supervisors may be negatively affected. Conversely, when people have high expectation for active management-by-exception leadership from their supervisors, and they get it, they will be more satisfied with their job and they will have better attitudes toward their supervisors.

Another reason why these results are interesting is that it highlights the important roles followers play in the follower-leader relationship. This study supports Lord's categorization

theory (Lord, 1985; Lord et al., 1984) discussed earlier to the extent that it demonstrated that followers' leader prototypes affected their perceptions of their leaders when they were either congruent or incongruent with their leaders actual behaviours. To that end, this study also adds to the PS fit literature by demonstrating the impact another form of congruence can have on certain outcomes. As mentioned earlier, past research has demonstrated that congruence between followers and leaders can affect follower satisfaction with their job and with their leaders, but those studies measured fit in the context of value and goal congruence and personality similarity (Kristof-Brown et al., 2005). These findings highlight the potential importance of congruence between the expectations followers have of their leaders and followers' perceptions of their leaders' actual behaviours. While incongruence can negatively impact certain outcomes, congruence can positively affect certain outcomes.

Practical Implications

The results of this study suggest that transformational leadership is prevalent, expected, and effective at all hierarchical levels across the Canadian military. This is consistent with the expectations set by the Canadian Forces leadership model and the Canadian Forces Performance Appraisal System. Contrary to expectations set out in the Canadian Forces Performance Appraisal System, contingent reward leadership is also prevalent, expected by followers, and almost as effective as transformational leadership across all levels of the Canadian Forces. Indeed, perhaps contingent reward leadership is not as embedded in mechanistic organizations as past researchers have suggested (Singer et al., 2001). Except for the minority of cases where followers' had high expectations for active management-by-exception leadership, that style of leadership was generally not expected by members of the military, and it had either negative consequences, or no impact on the outcomes measured in this study. These results suggest that,

because of their positive impact on followers' job satisfaction and their attitudes toward their supervisors, the Canadian military should continue to encourage transformational leadership and contingent reward leadership behaviours at all hierarchical levels. Until the conditions whereby active management-by-exception leadership is effective are better understood, the Canadian military should discourage an excess of those behaviours by its leaders at all levels.

Limitations and Future Research

A major strength of this study is that its results are based on a sizeable field sample. Despite the overall size, however, the senior officer group was not large enough, resulting in reduced power. Had that group been larger, the results may have been different. That is not to say that significant differences would not have been found. On the contrary, a larger senior officer group might have captured the significant differences between that and the junior officer group reported in past research. More research examining the manifestation and effects of the active FRL styles across all levels of the military, and other organizations, is needed.

Another limitation of this study is that all of the data came from the same source, followers. As a result, the findings reported here are subject to the problems associated with common method variance (e.g., Podsakoff & Organ, 1986). Furthermore, because the data are based on followers' ratings of leaders only, the results may not be a true estimate of the frequency of their leaders' actual behaviours. Also, because the order in which the actual and expected leadership scales were presented could not be counterbalanced, the results may be susceptible to order effects. Order effects, or priming, may have also been responsible for the high correlation between the transformational and contingent reward leadership behaviours and attitudes toward the supervisor. While the job satisfaction scale precedes the MLQ items, the attitudes toward the supervisor items followed directly after the MLQ items in the UMP battery.

Rating their supervisors' behaviours and their own expectations of their supervisors may have affected their attitude ratings resulting in inflated correlations.

Another potential limitation associated with the method used here has to do with to whom the UMP is administered. Because the surveys are administered to unit populations, it is possible, and likely, that more than one follower rated the same supervisor. Consequently, the results may be prone to reduced variability in the ratings of leaders' behaviours. Unfortunately, for confidentiality reasons, the Canadian Forces prevents the identification of leaders in this form of research, so this limitation was not preventable. However, this problem was not likely to be large in that any one unit would have at most eight subordinates rating the same supervisor. In no instance was 100% of any unit present in the sample data.

Moreover, the use of follower ratings made it impossible to differentiate the level of supervisor performing the behaviours. For example, the supervisor of a junior NCM may be another junior NCM, a senior NCM, or even an officer, though the latter case would be rare. Although it enhances power through larger group sizes, the use of rank clusters prohibited the identification of rank of the supervisors and, as a result, one cannot make precise inferences about the kind of leadership performed at each rank level. One can only conclude that junior NCMs reported that their supervisors were performing transformational leadership behaviours at rates significantly lower than senior NCMs. Unfortunately, based on how the Canadian Forces collects its demographic information using the UMP, this limitation was not preventable. Despite that potential concern, however, the rank clusters did represent four very distinct hierarchical levels, and the results provide meaningful information to military organizations.

Finally, two potential limitations associated with the sample need to be addressed. First, the data analyzed here is based on a sub-sample of participants that were screened in based on

meeting the required criteria. The original data set received was based on several samples collected from several populations. Therefore, the sample received was based on those who voluntarily fill out the surveys, and the sub-sample analyzed was based on those who completed the surveys thoroughly enough to meet inclusion requirements. It is possible that the excluded data may have been derived from another sub-sample whose attitudes and perceptions are quite different. Therefore, caution should be had with regard to the generalizability of these results. Second, because the results reported here are based on a military sample, the findings associated with hierarchical rank and the congruence effects associated with active management-by-exception leadership may be limited in their generalizability. The significant findings, however, pertaining to level and congruence warrant further investigation, not only in other militaries, but in other industries as well.

Notwithstanding the limitations addressed above, the findings reported here add to the transformational leadership literature by demonstrating that, relative to higher ranking members, transformational leadership was manifested less frequently at the lowest levels of military leadership - the junior noncommissioned members. Notwithstanding behaviour frequency, however, the results of this study suggest that transformational and contingent reward leadership have equivalent effects on outcomes at levels of the Canadian Forces. Unfortunately, this study was limited in understanding the question of “why” transformational and contingent reward leadership styles were effective across hierarchical levels. Future research should not only seek to examine the manifestation and effects of leadership in different contexts, but also why they occur where they do and why they affect outcomes as they do in different contexts. It has been suggested that leaders can "derail" when they are not developmentally ready to manage the complexity of higher level positions, and when they lack the organization, or "big picture" view

that is required for success at high levels (Kovach, 1986). Other researchers have suggested that authentic transformational leadership requires a higher level of moral development by the leader (Bass et al., 2006). From those perspectives, future research needs to address whether it is fair to expect transformational leadership at the lowest levels of the hierarchy, and whether it is truly required. Researchers should also seek to examine how situational constraints, such as role requirements and restrictions, organizational culture, and national culture affect leadership behaviours and their effects. For example, are junior NCMs empowered with enough responsibility and flexibility to be fully transformational or are there certain aspects of transformational leadership that they simply cannot fulfill? In the latter case, how that affects followers' attitudes and other relevant outcomes is an important research question.

Finally, this study demonstrated specific conditions whereby active management-by-exception leadership had strong positive and negative effects on important outcomes. Hopefully, these results will spark further research, using more complex and objective research methods, addressing the roles followers' play in affecting leadership outcomes, as well as the conditions whereby active management-by-exception leadership, and other leadership styles, have a strong impact on subordinates and other relevant outcomes.

Conclusion

This study contributes to the existing leadership literature by demonstrating the manifestation and positive effects transformational leadership and contingent reward leadership have on outcomes associated with effective leadership across various hierarchical levels of the Canadian Forces. Perhaps more significant, however, this study provides insight into the contingent nature of active management-by-exception leadership by demonstrating how its effects can either be positively or negatively affected by the expectations followers have about

their leaders. Finally, the findings reported here add to the PS fit literature by demonstrating how congruence between followers' expectations and their perceptions of their leaders' actual behaviours can affect outcomes. Note, the findings or views in this report are not to be construed as an official position of the Canadian Forces or Department of National Defence.

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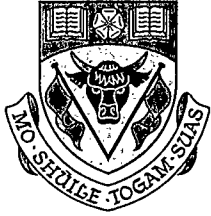
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Appendix A
Ethics Approval – University of Calgary



UNIVERSITY OF
CALGARY

Celebrate *40 years*
2006

CERTIFICATION OF INSTITUTIONAL ETHICS REVIEW

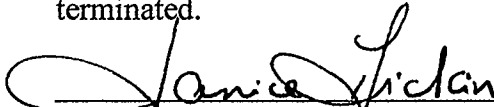
This is to certify that the Conjoint Faculties Research Ethics Board at the University of Calgary has examined the following research proposal and found the proposed research involving human subjects to be in accordance with University of Calgary Guidelines and the Tri-Council Policy Statement on *"Ethical Conduct in Research Using Human Subjects"*. This form and accompanying letter constitute the Certification of Institutional Ethics Review.

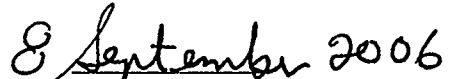
File no: **4966**
Applicant(s): **Gary W. Ivey**
Department: **Psychology**
Project Title: **Transformational versus Transactional Contingent Reward Leadership: Subordinate Preference and its Effect on Outcomes in a Military Sample**
Sponsor (if applicable):

Restrictions:

This Certification is subject to the following conditions:

1. Approval is granted only for the project and purposes described in the application.
2. Any modifications to the authorized protocol must be submitted to the Chair, Conjoint Faculties Research Ethics Board for approval.
3. A progress report must be submitted 12 months from the date of this Certification, and should provide the expected completion date for the project.
4. Written notification must be sent to the Board when the project is complete or terminated.


Janice Dickin, Ph.D, LLB,
Chair
Conjoint Faculties Research Ethics Board


Date:

Distribution: (1) Applicant, (2) Supervisor (if applicable), (3) Chair, Department/Faculty Research Ethics Committee, (4) Sponsor, (5) Conjoint Faculties Research Ethics Board (6) Research Services.

Appendix B
Ethics Approval – Directorate of Personnel Applied Research



National Defence

Défense nationale

National Defence Headquarters
Ottawa, Ontario
K1A 0K2

Quartier général de la Défense nationale
Ottawa (Ontario)
K1A 0K2

May 2006

Chair Person
Research Ethics Board
Department of Psychology
University of Calgary
2500 University Drive North West
Calgary AB T2N 1N4

Dear Sir or Madame:

The purpose of this letter is to confirm that the Canadian Forces Director Personnel Applied Research (D Pers AR) has agreed to provide Captain Gary Ivey, one of your graduate students and a serving member of the Canadian Forces, with data collected by D Pers AR for analysis in his Master's Thesis.

All research conducted by D Pers AR is first reviewed by an internal research ethics committee and approved under the authority of the Defence Administrative Orders and Directives governing research involving human subjects. Research approved under these guidelines must conform to the Tri-Council Code of Conduct for Research Involving Humans, which is consistent with the Canadian Code of Ethics established by the Canadian Psychological Association.

The data to be provided to Captain Ivey will be collected by D Pers AR researchers as part of an ongoing Canadian Forces project that has already received ethics approval. The data will be collected through the administration of written surveys for which participation will be voluntary. This project does not require the identification of individual participants. In order to protect the anonymity of all participants, participant names and other identifiers will not be collected. Furthermore, Captain Ivey will only be sent data on the variables and demographic information outlined in his thesis proposal, none of which would lead to identification of participants.

Under the terms of the Memorandum of Understanding signed by Captain Ivey, his advisor, and D Pers AR, the data provided by D Pers AR is restricted to analyses required for his Master's thesis. Any alternate or subsequent use of this data must receive prior approval by D Pers AR.

Should you have questions or concerns regarding Captain Ivey's request for archival data, please contact Lieutenant Commander Dave Woycheshin at (613) 996-0135.

Sincerely,

S.A.T. Eyres, PhD
Colonel
Director Personnel Applied Research

Canada

Appendix C
Confidence in Leadership (Attitudes Toward the Supervisor) Scale

LEADERSHIP IS VERY IMPORTANT IN ANY MILITARY UNIT. THE DEGREE OF CONFIDENCE THAT YOU HAVE IN YOUR LEADERS OFTEN REFLECTS HOW EFFECTIVE THE LEADERSHIP IN A UNIT IS. USING THE SCALE BELOW, INDICATE YOUR LEVEL OF AGREEMENT WITH EACH STATEMENT.

1	2	3	4	5
Completely Disagree	Disagree	Neither Agree nor Disagree	Agree	Completely Agree

1	I am satisfied with my immediate supervisor.	1	2	3	4	5
2	My immediate supervisor is effective.	1	2	3	4	5
3	My immediate supervisor performs his/her job well.	1	2	3	4	5
4	I have confidence in my immediate supervisor.	1	2	3	4	5