

Emotional Intelligence & Military Leadership

Prepared for: Canadian Forces Leadership Institute

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The role of leadership in the Canadian Forces is becoming increasingly important as defence issues and challenges become more multifaceted. Military effectiveness relies on the ability of leaders to respond to ongoing pressures and to manage others efficiently. One goal of the Canadian Forces is to improve the effectiveness of today's and future military leaders by implementing rigorous standards for selecting, developing, and assessing military leaders.

This focus on leader selection and development has prompted an interest in examining the qualities of successful leaders. Recently, interest in the new concept of emotional intelligence has flourished as a result of the claims suggesting that emotional intelligence can be used to select and develop successful leaders (e.g., Bar-On, 1997; Goleman, 1998). Leaders who exhibit heightened levels of emotional intelligence may be more likely to engage in transformational leadership behaviours than those individuals who possess lower levels of emotional intelligence (e.g., Barling, Slater, & Kelloway, 2000; George, 2001; Goleman, 1998; Megerian & Sosik, 1996). However, only a few studies have examined the relationship between emotional intelligence and transformational leadership.

The purpose of this paper is to present a review of emotional intelligence models and measures, and to make a conceptual link between components that fall under the concept of emotional intelligence and effective leadership behaviours. In Part 1 of this paper the concept of emotional intelligence will be introduced and reviewed. Effective leadership behaviours in relation to emotional intelligence will be discussed in Part 2. Finally, in Part 3, future research initiatives and recommendations for the study of emotional intelligence in relation to military leadership will be presented.

Part 1: Overview of Emotional Intelligence

History & Development of Emotional Intelligence

Despite the widespread belief that emotions and intelligence are two contradictory concepts, emotions have been included in the intelligence literature since the early 1920's (Mayer & Salovey, 1989; Mayer, Salovey, & Caruso, 2000c). Individuals who expressed emotion were often viewed negatively because emotions and reasoning were seen as opposing terms (Grandey, 2000; Mayer & Salovey, 1997; Mayer et al., 1990; Mayer et al., 2000c). In fact, those who engaged in emotional expression were often considered mentally ill and were subject to therapy in order to suppress their emotionality (Mayer et al., 2000c). It wasn't until the early 1960's that some researchers agreed that emotions could guide one's thinking and actions and could direct one's attention toward solving problems (Mayer & Salovey, 1997; Mayer et al., 2000c).

Many prominent researchers in the field of emotional intelligence have compared the emotional intelligence construct to an historical intelligence construct labelled social intelligence (e.g., Bar-On, 2000; Mayer & Salovey, 1990; Mayer & Salovey, 1993; Salovey & Mayer, 1990; Mayer et al., 2000c). In some instances, these two types of intelligences have been used interchangeably (e.g., Bar-On, 2000). Emotional intelligence has also been referred to as a type of social intelligence (e.g., Mayer & Salovey, 1990; Mayer & Salovey, 1993; Mayer et al., 2000c).

Thorndike (1920) introduced the concept of social intelligence. He divided intelligence into three facets: abstract intelligence (i.e., managing and understanding ideas), mechanical intelligence (i.e., managing and understanding concrete objects), and social intelligence (i.e., managing and understanding people). Social intelligence refers to the ability to perceive one's own and others' behaviours and motives in order to successfully make use of that information in social situations (Thorndike, 1920). Social intelligence involves adapting to social situations and using social knowledge to act accordingly (Mayer &

Salovey, 1993). Cantor and Kihlstrom (1987) referred to social intelligence as possessing knowledge of social norms, and having the ability to get along well with others.

A necessary step in identifying a new intelligence is to determine whether it is distinct from already existing types of intelligence (Mayer et al., 2000c). The social intelligence construct had many early critics due to the finding that it was not easily distinguishable from other types of intelligence (Cronbach, 1960; Mayer & Salovey, 1993; Mayer & Salovey, 1997; Thorndike & Stein, 1937). One reason for this lack of discriminant validity was that the definition of social intelligence was too broad (Mayer & Salovey, 1993). Furthermore, there were few attempts to measure the social intelligence construct (e.g., Cronbach, 1960; Riggio, Messamer, & Throckmorton, 1991; Schneider, Ackerman, & Kanfer, 1996) and many endeavours proved to be unsuccessful as a result of the increased reliance on self-report measures (e.g., Hedlund & Sternberg, 2000). Many researchers felt that the study of social intelligence was not warranted as a result of the inability to accurately define and measure this construct (Mayer & Salovey, 1997).

Mayer and Salovey (1997) suggested that the emotional intelligence construct would not suffer from the same problems as the social intelligence construct. Emotional intelligence focuses more on emotional problem solving, rather than on the social, political, or verbal aspects inherent in the social intelligence construct (Mayer et al., 2000c; Mayer & Geher, 1996). Emotional intelligence is also similar to interpersonal and intrapersonal intelligences, as defined by Gardner (1983) in his theory of multiple intelligences (Mayer & Salovey, 1993; Mayer & Geher, 1996). Gardner (1983) defined interpersonal intelligence as the ability to understand others, and he defined intrapersonal intelligence as the ability to understand oneself.

The theory guiding the development of the emotional intelligence construct comes from the notion that emotions are one of the necessary mental operations along with

motivation and cognition (Mayer & Salovey, 1993; Mayer et al., 2000c). Our emotions serve as signals that result in reactions to changing circumstances (e.g., a response to a threat may be fear or anger; Mayer et al., 2000c). In essence, our emotions impact on our behavioural responses to situational cues (Arvey, Renz, & Watson, 1998; Mayer et al., 2000c). Emotional intelligence may arise as a result of the interaction between emotions and cognitions (Mayer & Salovey, 1995; Mayer & Salovey, 1997; Mayer et al., 2000c). For example, mood can influence an individual to think positively or negatively and there has been a great deal of research examining the impact of mood on effective decision-making (Mayer & Salovey, 1993; Mayer et al., 2000c). Emotionally intelligent individuals use their emotions to engage in intelligent thought and also possess the ability to think intelligently about their emotions (Mayer & Salovey, 1997; Mayer et al., 2000c).

Emotional intelligence gained popular and academic attention during the 1990's. During this time, audacious claims were made regarding the ability of emotional intelligence to predict work and non-work "success". However, many of these claims lack empirical evidence and have been based on anecdotal accounts (Barrett, Miguel, Tan, & Hurd, 2001; Dulewicz & Higgs, 2000). The first uses of the term "emotional intelligence" were by Mayer, DiPaolo and Salovey (1990) and Salovey and Mayer (1990). The popularity of emotional intelligence was not a result of the surge of academic work but rather a result of the publication of Daniel Goleman's book entitled "Emotional Intelligence" (Goleman, 1995), and his successive book examining emotional intelligence at work (Goleman, 1998). In 1997, another researcher, Bar-On introduced the first published scale assessing self-reported emotional intelligence. Bar-On (1997) has also contributed to the prominence of emotional intelligence in popular culture.

There has been much effort in the past decade devoted to defining and measuring the emotional intelligence construct. However, researchers have not reached a consensus on the

definition and measurement of emotional intelligence (e.g., Dulewicz & Higgs, 2000; Mayer, Salovey, & Caruso, 2000a; Mayer, et al., 2000c). In fact, several emotional intelligence models have been proposed that have competing viewpoints on the nature of this construct (e.g., Mayer et al., 2000c).

Emotional Intelligence Models

There have been many different uses of the term emotional intelligence (Dulewicz & Higgs, 2000; Mayer et al., 2000a; Mayer et al., 2000c). Definitions or models of emotional intelligence tend to be either ability-based or a mixture of abilities and personality traits (i.e., mixed models; Mayer et al., 2000c). The ability-based model refers to emotional intelligence as a type of intelligence reflecting the ability to process emotional information (Mayer & Salovey, 1997). In contrast, the mixed emotional intelligence model incorporates both ability factors and personality traits (Mayer et al., 2000c).

Ability-Based Emotional Intelligence Model

Initially, Mayer, Salovey, and their colleagues included some personality traits in their conceptualization of emotional intelligence (Hedlund & Sternberg, 2000; Mayer & Salovey, 1997). Their most recent model has moved away from the inclusion of personality concepts toward a more specific model focusing on the mental abilities involved in the processing of emotional information (Hedlund & Sternberg, 2000; Mayer & Salovey, 1997; Mayer et al., 2000c; Mayer & Salovey, 1993). Additionally, there was a shift from defining emotional intelligence in terms of individual abilities, such as emotional understanding, toward a more comprehensive ability-based definition that incorporated multiple emotional abilities (Mayer et al., 2000). Mayer and Salovey (1997) defined emotional intelligence as “the ability to perceive accurately, appraise, and express emotion; the ability to access and / or generate feelings when they facilitate thought; the ability to understand emotion and

emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth” (p. 10).

Emotional intelligence as an ability involves the interchange of emotions and intelligence (Mayer & Salovey, 1995; Mayer et al., 2000c). Emotionally intelligent individuals possess a clear understanding of their feelings, and can restore their moods more quickly than those individuals with low levels of emotional intelligence (Ciarrochi, Chan, & Caputi, 2000; Mayer & Salovey, 1993; Mayer & Salovey, 1995). This model suggests that emotional intelligence fulfills the criteria for inclusion as a type of intelligence (Mayer et al., 2000; Mayer et al., 2000c). These criteria indicate that: (1) measures of emotional intelligence have correct and incorrect responses; (2) emotional intelligence correlates with other types of mental abilities (e.g., verbal intelligence); and (3) emotional intelligence is developmental in nature and will increase with age and experience (Mayer et al., 2000; Mayer et al., 2000c). Only recently have researchers begun to test these propositions.

Mayer and Salovey (1997) arranged the four branches of emotional intelligence from basic processes (i.e., emotional perception and emotional facilitation / integration) to higher-level mechanisms (i.e., emotional understanding and emotional management). Each branch contains abilities that range from early developing abilities to more advanced abilities (Mayer & Salovey, 1997). Individuals with heightened levels of emotional intelligence are expected to develop these abilities more quickly than those individuals with lower levels of emotional intelligence (Mayer & Salovey, 1997). These emotional abilities tend to be positively correlated with each other (Mayer et al., 2000). The four branches and their respective abilities are shown in Table 1. The following is an in depth discussion of the ability-based approach to the study of emotional intelligence.

Table 1: Mayer & Salovey’s (1997) Ability-Based Emotional Intelligence Model

| Branch | Ability |
|--|--|
| Branch 1: Perceiving, appraising and expressing emotions | <ul style="list-style-type: none"> ○ Perceive and express emotions in one's feelings and thoughts ○ Perceive and express emotions in other people, artwork, etc. using language, sound, appearance and behaviour ○ Accurate expression of emotion and communication of the needs associated with feelings ○ Discriminate among different emotional expressions, such as accurate versus inaccurate expression and honest versus dishonest expression |
| Branch 2: Using emotions to facilitate thought | <ul style="list-style-type: none"> ○ Emotions direct attention and prioritize thinking ○ Moods alter one's perception and may result in the understanding of different points of view ○ Emotional states encourage problem-solving approaches (e.g., happiness can trigger creativity) |
| Branch 3: Understanding and reasoning with emotions | <ul style="list-style-type: none"> ○ Label emotions and recognize relationships among different emotions and their meanings ○ Understand the meanings of emotions and the information they convey regarding relationships ○ Interpret complex feelings and understand combinations of different feelings (e.g., experiencing joy and fear simultaneously) ○ Understand transitions among emotions |
| Branch 4: Managing / regulating emotions | <ul style="list-style-type: none"> ○ Openness to pleasant and unpleasant feelings ○ Reflectively engage or detach from emotions depending on whether they can be used for intellectual or emotional growth ○ Manage emotions in oneself and others by moderating negative emotions and enhancing positive emotions |

Perceiving, Appraising, & Expressing Emotions. Emotional perception is the lowest level in Mayer and Salovey's (1997) model. Emotional perception occurs when individuals can effectively identify emotions and their content (Mayer & Salovey, 1997). Identifying emotions in oneself, others, and objects (e.g., art and stories) are integral to successfully perceiving emotions and are necessary to engage in the tasks involved in the more advanced branches in this model (Mayer et al., 2000a). Another group of abilities associated with emotional perception are accurate expression of emotion and accurate expression of the needs arising from emotions (Mayer et al., 2000c). In essence, emotional perception involves accurately perceiving emotions and their content in facial expressions, objects, and stories (Mayer et al., 2000a). The ability to perceive emotions is important because if an individual can accurately interpret emotions then he / she may be better equipped to respond to situations involving emotional interactions (Mayer, Salovey, & Caruso, 2000b). Appraising emotions can lead to the utilization of emotional information for making decisions and / or forming judgements (Mayer and Salovey, 1997). The ability to appraise and express emotional information involves understanding nonverbal cues, such as facial expressions (Mayer & Salovey, 1997). Some individuals, such as those who suffer from alexthymia, tend to have difficulty appraising and expressing their emotions (Parker, Taylor, & Bagby, 2001). Alexthymia has been found to be negatively associated with scores on an emotional intelligence measure (Parker et al., 2001). Individuals who possess the ability to appraise and express their emotions also tend to be more empathetic (e.g., Mayer & Salovey, 1997). Some areas in which the ability to perceive / identify emotions would lead to enhanced performance include job interviews, interacting with family members and co-workers, and appreciating art and stories (Mayer et al., 2000b).

Using Emotions to Facilitate Thought. Emotional facilitation of thought involves how emotions are used and how they impact on cognitions to assist in thought processes or problem solving (Mayer et al., 2000a). Emotions can act as mechanisms to prioritize thinking or inhibit thought processes (Mayer et al., 2000a). For example, a positive mood can cause an individual to think more optimistically about a given situation, whereas a negative mood can result in pessimism (Mayer et al., 2000a). This may result in the individual considering multiple perspectives in a given situation (Mayer & Salovey, 1997). Emotional intelligence arises when these thought processes lead to enhanced problem solving and direct an individual's attention toward the problem situation (Mayer et al., 2000c). Additionally, the ability to predict how one would feel in a given situation in order to engage in planning would be characteristic of an individual who scores highly on emotional facilitation (Mayer & Salovey, 1997). That is, such individuals can "anticipate" or "generate" feelings when asked about a potential situation (Mayer & Salovey, 1997).

Understanding & Reasoning With Emotions. Emotional understanding refers to the ability to understand emotions and to reason with emotional knowledge (Mayer & Salovey, 1997; Mayer et al., 2000c). For example, individuals with advanced emotional intelligence possess the ability to discriminate among different emotions, and to understand that particular emotions can arise from different situations (e.g., sadness results from the loss of a loved one; Mayer & Salovey, 1997). Furthermore, the ability to recognize and understand the simultaneous experience of contradictory emotions is characteristic of an individual who has a high level of emotional understanding (Mayer & Salovey, 1997). Such individuals possess the ability to understand combinations of different emotions (Mayer & Salovey, 1997). Additionally, understanding that emotional progressions can occur depending on different situational circumstances is a quality of individuals with heightened

levels of emotional intelligence (e.g., happiness can change to sadness; Mayer & Salovey, 1997; Mayer et al., 2000a). Moreover, an individual who possesses a high level of emotional understanding can better comprehend the advantages and disadvantages of future actions (Mayer et al., 2000b). Understanding the consequences of moods and emotions is also characteristic of an individual who possesses advanced emotional intelligence (Mayer & Salovey, 1997).

Managing / Regulating Emotions. The ability to manage or regulate emotions in oneself and in others is the most advanced emotional ability in the ability-based model (Mayer et al., 2000c). Possessing the ability to calm down after a hostile situation is an example of emotional management (Mayer et al., 2000c). Emotional management involves consciously considering alternative solutions to different emotional problems and choosing the most effective response (Mayer et al., 2000a). The ability to detach one's emotions from one's behaviour is also a feature of an individual with heightened emotional management abilities (Mayer & Salovey, 1997). An individual who engages in emotional management may also reflect on their feelings and moods in order to gain a greater understanding of the impact they will have on future behaviours (Mayer & Salovey, 1997). High emotionally intelligent individuals also possess the ability to manage emotions in others by regulating the expression of negative emotions and enhancing the expression of positive emotions (Mayer & Salovey, 1997).

Mixed Emotional Intelligence Model

Mixed models of emotional intelligence combine mental abilities and personality traits (Mayer et al., 2000c), and are considerably different from ability-based models. Goleman (1995) referred to emotional intelligence as being comprised of five dimensions: knowing one's emotions, managing emotions, motivation, recognizing emotions in others,

and handling relationships. Emotional intelligence, according to Goleman (1995), includes zeal, persistence, self-control, and motivation. Goleman (1995; 1998) was the first to make claims regarding the ability of emotional intelligence to predict life and job success. Goleman's (1995; 1998) view of emotional intelligence is not based on scientific evidence and has been criticized for including almost anything that may predict successful life functioning (Hedlund & Sternberg, 2000; Mayer et al., 2000a). Therefore, the present review of mixed emotional intelligence models will not include a detailed discussion of Goleman's (1995; 1998) model.

There has been more support for Bar-On's (1997) model of emotional intelligence (e.g., Bar-On, 2000; Hedlund & Sternberg, 2000). Bar-On (1997) defined emotional intelligence as "an array of *non-cognitive capabilities*, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressures" (Bar-On, 1997, p. 14). In his review of personality literature, Bar-On (1997) identified five major areas that may contribute to success in life including intrapersonal functioning, interpersonal skills, adaptability, stress management, and general mood. Intrapersonal functioning refers to the ability to be aware of and understand one's emotions, feelings and ideas (Bar-On, 1997; Bar-On, 2000). Being aware of and understanding others' emotions and feelings is characteristic of an individual with strong interpersonal skills (Bar-On, 1997; Bar-On, 2000). Adaptability refers to the ability to be flexible and alter one's feelings with changing situations (Bar-On, 1997; Bar-On, 2000). An individual engages in stress management when he /she is able to cope with stress and control emotions (Bar-On, 1997; Bar-On, 2000). General mood refers to the ability to feel and express positive emotions and remain optimistic (Bar-On, 1997; Bar-On, 2000). These five broad aspects of emotional intelligence consist of more specific characteristics that are presented in Table 2.

Some of Bar-On's (1997) emotional intelligence components can be labelled mental abilities (e.g., emotional self-awareness and problem solving) and other components appear to

Table 2: Bar-On's (1997) Mixed Emotional Intelligence Model

| Factors | Definition |
|---------------------------|--|
| Intrapersonal functioning | <p>Aware of and understand one's emotions, feelings, and ideas</p> <ul style="list-style-type: none"> ○ <i>Emotional self-awareness</i> – recognizing & understanding one's emotions ○ <i>Assertiveness</i> – express feelings, beliefs, & thoughts openly ○ <i>Self-regard</i> – awareness of and respect for oneself ○ <i>Self-actualization</i> – realization of one's potential & to engage in activities that one enjoys ○ <i>Independence</i> – self-direction and self-control in thinking & actions |
| Interpersonal skills | <p>Aware of and understand others' emotions and feelings</p> <ul style="list-style-type: none"> ○ <i>Empathy</i> – awareness of and appreciation for the feelings of others ○ <i>Interpersonal relationships</i> – establishing mutually satisfying relationships that demonstrate closeness ○ <i>Social responsibility</i> – demonstrating that one is a cooperative member of a group who contributes in a constructive manner to the well-being of the group |
| Adaptability | <p>Be flexible and alter one's feelings with changing situations</p> <ul style="list-style-type: none"> ○ <i>Problem solving</i> – identifying and generating solutions for personal & social problems ○ <i>Reality testing</i> – assessing correspondence between one's perception and reality ○ <i>Flexibility</i> – adjusting one's feelings, thoughts, and behaviours to changing situations |
| Stress management | <p>Cope with stress and control emotions</p> <ul style="list-style-type: none"> ○ <i>Stress tolerance</i> – withstanding adverse events and stressful situations ○ <i>Impulse control</i> – resisting or delaying impulse and controlling one's emotions |
| General mood | <p>Feel and express positive emotions and remain optimistic</p> <ul style="list-style-type: none"> ○ <i>Happiness</i> – feeling satisfied with one's life and express positive emotions ○ <i>Optimism</i> – look on the bright side of life and maintain a positive attitude in the face of adversity |

be more personality based (e.g., adaptability and optimism; Hedlund & Sternberg, 2000; Mayer et al., 2000c). Bar-On (1997) claims that his model predicts the potential for success rather than success itself. Mixed models appear to overlap with dozens of other constructs (Mayer et al., 2000c) and research examining this issue has begun to accumulate.

Measurement of Emotional Intelligence

The development of competing models of emotional intelligence has resulted in the construction of different measures designed to assess emotional intelligence (Dulewicz & Higgs, 2000; Mayer et al., 2000d). These measures tend to be grouped into three categories: self-report, ability-based, and observer-rating methods (Mayer et al., 2000d). Researchers have not reached a consensus with regard to the most appropriate method of measurement for the emotional intelligence construct (Dulewicz & Higgs, 2000). There are a variety of measures assessing the different components of emotional intelligence (e.g., scales assessing empathy or emotional expression), however the present review is limited to the discussion of popular measures that are being marketed to assess emotional intelligence, and those measures that are representative of the competing emotional intelligence models.

Ability-Based Emotional Intelligence Measures

The first ability-based measure of emotional intelligence was the Multi-Factor Emotional Intelligence Scale (MEIS; Mayer et al., 2000). The MEIS was designed to assess four components: emotional perception (i.e., identifying emotions in faces and stories); emotional facilitation of thought (i.e., relating emotions to other sensations, such as taste and colour); emotional understanding (i.e., solving emotional problems and understanding similar and

different emotions); and emotional management (i.e., regulating emotions in oneself and in others). The MEIS underwent several revisions as a result of the low internal consistency and the length of the measure (e.g., Ciarrochi et al., 2000; Mayer, Salovey, & Caruso, 1999). The MEIS provided the framework for the subsequent development of the Mayer Salovey Caruso Emotional Intelligence Test (MSCEIT; Mayer et al., 1999).

The MSCEIT also assesses Mayer and Salovey's (1997) four branch model of EI: emotional perception, emotional integration / facilitation, emotional understanding, and emotional management. Mayer et al. (1999) developed the MSCEIT to measure individuals' performance on emotion-related tasks (Mayer et al., 1999). For example, several items on the MSCEIT require the test-taker to identify emotions in faces. Mayer et al. (1999) reported that the reliability of the MSCEIT improved from the original MEIS scale. This measure provides an overall emotional intelligence score and scores on each of the four sub-scales (Mayer et al., 2000d).

The scales measuring emotional perception assess the ability to perceive emotions in oneself and others, as well as in objects, art, and stories (Mayer et al., 2000b; Mayer et al., 2000d). In these sections, the test taker is required to decide the amount of emotional content in the faces, landscapes, and designs. The scales measuring emotional facilitation / integration assess the ability to use and feel emotion in order to communicate feelings and to use emotional information in problem solving (Mayer et al., 2000b; Mayer et al., 2000d). This sub-scale assesses similarities between emotional feelings and other sensations, such as temperatures and tastes. The scales measuring emotional understanding assess the ability to understand emotional information and the different combinations and progressions of emotions (Mayer et al., 2000b; Mayer et al., 2000d). Participants may be asked to indicate what happens as an emotion changes or becomes more intense or to identify a change in mood (Mayer et al., 2000d). Finally, the scales measuring emotional management assess the

ability to be open to feelings and to monitor them in oneself and others (Mayer et al., 2000b; Mayer et al., 2000d). This scale of the MSCEIT requires the test-taker to select a course of action in order to achieve a particular goal (Mayer et al., 2000d).

One issue that still remains with the use of the MSCEIT is the ambiguity of the correct response (Mayer et al., 2000). There are three methods of arriving at the correct response on an objective EI measure: target criteria, expert criteria, and consensus criteria (Mayer & Geher, 1996; Mayer et al., 2000; Mayer et al., 2000d). The target criteria method involves using the target's actual self-reported response / feeling as the correct response when the target's emotional expressions or creations are being rated (Mayer & Geher, 1996). The test taker is correct when his / her response corresponds with the emotions reported by the target for a given item. Expert criteria involve asking experts in the field of emotions, such as clinical psychologists, to judge how the target is feeling by observing the target or reading his or her account of a situation (Mayer et al., 2000). The test taker receives credit if his or her response corresponds to that of the experts. Finally, the consensus method involves gathering judgements from a number of individuals; the test taker is deemed correct if he or she has the same view as the group (Mayer & Geher, 1996; Mayer et al., 2000). The consensus scoring procedure has been viewed as the most accurate and reliable method of determining the correct response (Mayer et al., 1990; Mayer & Geher, 1996; Mayer et al., 2000; Mayer et al., 2000d). Correlations among these three scoring methods tend to be positive (Mayer et al., 2000; Mayer et al., 2000d).

The ability-based approach to the study of emotional intelligence has also been measured by self-report. However, self-report tends to be a less direct means of assessing one's performance on ability-based tasks (Mayer & Geher, 1996; Mayer et al., 2000c). An example of efforts to measure ability-based emotional intelligence through the self-report method is the Trait Meta-Mood Scale (TMMS) developed by Salovey, Mayer, Goldman, Turvey, and

Palfai (1995). The TMMS measured attention to emotion, emotional clarity, and emotional repair (Salovey et al., 1995). Shutte, Malouff, Hall, Haggerty, Cooper, Golden, and Dornheim (1998) also developed a self-report emotional intelligence measure based on Mayer and Salovey's (1997) ability-based model.

Mixed Model Emotional Intelligence Measures

There are a number of self-report emotional intelligence measures (e.g., Bar-On, 1997; Goleman, 1995; Salovey et al., 1995). The most widely known self-report measure of emotional intelligence is the Emotional Quotient Inventory (EQ-i) developed by Bar-On (1997). The EQ-i is a self-report inventory that consists of 133 items assessing 15 sub-scales that are classified under 5 main factors (i.e., intrapersonal functioning, interpersonal skills, adaptability, general mood, and stress management). The intrapersonal functioning factor assesses emotional self-awareness, assertiveness, self-regard, self-actualization, and independence. The scale measuring interpersonal skills includes empathy, interpersonal relationships, and social responsibility. The adaptability scale assesses problem solving, reality testing, and flexibility. The scale measuring stress management assesses stress tolerance and impulse control. The general mood scale assesses happiness and optimism. Participants are asked to respond to the EQ-i based on a 5-point scale (1=not true of me, 5=true of me). The EQ-i demonstrates a high degree of internal consistency (Bar-On, 1997; Bar-On, 2000). In general, mixed models of emotional intelligence tend to assess a wide variety of personality traits (Mayer et al., 2000c; Mayer et al., 2000d).

Emotional Intelligence Measures: Reliability & Validity Issues

There has been a great deal of inquiry into the construct validity of emotional intelligence measures in recent years. In order to determine construct validity, it is necessary to determine if measures of the same construct correlate with each other (Crocker & Algina,

1986). This method is problematic for the study of emotional intelligence measures because no agreement has been reached as to what model / measure of emotional intelligence is most appropriate. Therefore, the construct validity of emotional intelligence is typically examined by evaluating the relationship of the different emotional intelligence measures with other constructs, such as personality and general cognitive ability. In order to constitute a set of abilities, emotional intelligence must be somewhat related to, but also appreciably distinct from, other types of intelligence (Mayer & Salovey, 1997; Mayer et al., 2000). Furthermore, issues of content validity (i.e., what the test measures) and incremental validity (i.e., whether the test adds to our knowledge beyond already existing measures) are also important for the understanding of the emotional intelligence construct (Barchard, 2000; Dawda & Hart, 2000; Mayer et al., 2000a; Mayer et al., 2000d).

An ability-based emotional intelligence measure should be distinct from personality traits (Mayer & Salovey, 1993; Mayer et al., 1999; Mayer et al., 2000c; Salovey & Mayer, 1994). Some research suggests low to moderate correlations between scores on the MSCEIT and personality (e.g., Barchard & Hakstian, 2001; Day & Carroll, 2002; Livingstone & Day, 2002). Furthermore, the MEIS tends to be independent of personality traits, such as neuroticism, but somewhat related to empathy, extraversion, and openness to experience (Ciarrochi et al., 2000). More research is needed to clarify the relationship between ability-based emotional intelligence measures and personality.

Ability-based emotional intelligence should be moderately correlated with other forms of intelligence (Mayer et al., 2000c). The emotional understanding scale of the MSCEIT has been found to be associated with general intelligence (e.g., Livingstone & Day, 2002). Verbal intelligence was moderately correlated with scores on an ability-based emotional intelligence measure (i.e., MEIS; Mayer et al., 2000). In another study, scores on the MEIS were unrelated to general cognitive ability scores (Ciarrochi et al., 2000). In order for the MSCEIT

to be considered a measure of intelligence, it should increase with age and experience (Mayer et al., 2000). Mayer et al. (2000) found that adults scored significantly higher on the MEIS than adolescents regardless of the type of scoring procedure used. More research is needed to determine the relationship between ability-based emotional intelligence measures and general intelligence.

The moderate to high relationship between self-report emotional intelligence measures and measures of the Big Five personality dimensions is well established (e.g., Bar-On, 2000; Bedwell, Hesson-McInnis, & Binning, 2000; Dawda & Hart, 2000; Livingstone & Day, 2002; Mayer et al., 2000c; Newsome, Day, & Catano, 2000). Many researchers suggest that the EQ-i would be best typified as a measure of personality (e.g., Davies, Stankov, & Roberts, 1998; Hedlund & Sternberg, 2000; Livingstone & Day, 2002). Research also suggests that self-report emotional intelligence measures are independent of general cognitive ability (e.g., Barchard & Hakstian, 2001; Davies et al., 1998; Livingstone & Day, 2002; Newsome et al., 2000). This finding does not comply with the original definition of emotional intelligence proposed by Salovey and Mayer (1990).

Understanding the Emotional Intelligence Construct

In general, the various conceptualizations of emotional intelligence appear to be somewhat distinct. The original definition of emotional intelligence proposed by Salovey and Mayer (1990) referred to emotional intelligence as the *ability* to think intelligently about emotions and their meanings. As an ability, emotional intelligence should be viewed as a type of *intelligence* that is relatively independent of personality traits (Mayer & Salovey, 1997). In contrast, Goleman's (1995) and Bar-On's (1997) definitions of emotional intelligence are broader and encompass various personality traits. Furthermore, mixed models of emotional intelligence have been criticized for including almost any construct that may predict success (e.g., Hedlund & Sternberg, 2000).

There appears to be some agreement among researchers that emotional intelligence is in need of further study and development, and that successful efforts to define and measure this construct may prove advantageous for organizations (e.g., Dulewicz & Higgs, 2000; George, 2000). Self-report mixed-model measures of emotional intelligence are unlikely to prove to be accurate measures of emotional intelligence, especially given their high correlations with various personality dimensions and low correlations with general intelligence (e.g., Barchard & Hakstian, 2001). Furthermore, many researchers question whether self-report emotional intelligence measures add incrementally to the prediction of work and non-work outcomes beyond the influence of personality (e.g., Ciarrochi et al., 2000; Newsome et al., 2000). In contrast, some available evidence suggests that ability-based emotional intelligence tends to be somewhat related to general intelligence (e.g., Barchard & Hakstian, 2001). Thus, there is evidence to suggest that ability-based emotional intelligence may hold up as a measure of intelligence (Barchard & Hakstian, 2001).

The concepts measured by the mixed model of emotional intelligence may be important however, they should not be incorporated under an intelligence framework (Mayer et al., 2000c). The original approach to the study of emotional intelligence (i.e., ability-based) must be explored by determining whether ability-based measures are related to cognitive ability and distinct from personality (Petrides & Furnham, 2000). Some researchers argue that only those measures that assess *mental abilities* should be labelled as measures of emotional intelligence (Barchard & Hakstian, 2001). Therefore, the present paper will utilize the ability-based model of emotional intelligence in order to gain a greater understanding of emotional intelligence in relation to military leadership.

PART 2: EMOTIONAL INTELLIGENCE & EFFECTIVE LEADERSHIP BEHAVIOURS

Leadership Theories

Leadership has been defined in many ways but researchers and practitioners still question the nature of leadership (e.g., Alimo-Metcalfe & Alban-Metcalfe, 2001; Bass, 1990; Bass, 1998; Den Hartog, Van Muijen, & Koopman, 1997; George, 2000; Northouse, 1997). Over the years there have been a number of theories addressing the understanding of leadership, including trait theory of leadership (e.g., Bryman, 1992), contingency theory (e.g., Fiedler & Garcia, 1987), path-goal theory (e.g., House, 1971), leader-member exchange theory (e.g., Graen, 1976), charismatic leadership theory (e.g., House, 1976), and transformational leadership theory (e.g., Burns, 1978; Bass, 1985). Many of these theories have common elements that have been synthesized in a number of reviews focusing on effective leadership behaviours (e.g., Conger & Kanungo, 1998).

Transformational leadership theory is the most renowned theory of leadership (Barling et al., 2000; Bass, 1985; Bass, 1998; Bass & Avolio, 1994; Judge & Bono, 2000; Northouse, 1997). Transformational leadership has also been commonly referred to as charismatic, visionary, and inspirational leadership (e.g., Bass & Avolio, 1993; Conger & Kanungo, 1994; Den Hartog et al., 1997; Northouse, 1997). Burns (1978) was the first to introduce the concept of transformational leadership in which the distinction was made between transactional and transformational leaders. Transformational leadership refers to a process involving the leader engaging his / her followers by raising their motivation and promoting their attachment to the organization (Burns, 1978). Transactional leadership focuses on the exchange that occurs between leaders and followers in which the leader rewards the follower for specific behaviours (Burns, 1978). Originally, Burns (1978) viewed transactional and transformational leadership as being at opposite ends of a continuum. Bass

(1985) suggested that a leader can display both transactional and transformational leadership behaviours.

Bass (1985) later built upon the work by Burns (1978) and devised a model of transformational leadership. Transformational leaders motivate their followers by raising their level of awareness about the importance of the organization's goals and by engaging followers to rise above their own self-interests for the interests of the organization or team (Bass, 1985). Transformational leadership theory suggests that there is an emotional attachment that occurs between the leader and his / her followers in that followers tend to identify themselves with a transformational leader to go beyond to call of duty to achieve the organization's mission (Bass, 1985; Bass, 1998; Yammarino & Bass, 1990).

Transformational leaders stimulate their followers to motivate them to align their values, beliefs, and motives with the vision of the organization (Bass, 1985; Bass, 1998; Burns, 1978).

Bass's (1985) original theory of transformational leadership and subsequent development of the Multifactor Leadership Questionnaire (MLQ) paved the way for the current theory of transformational leadership. The MLQ was designed to measure the behaviours characteristic of transformational and transactional leaders. Factor analytic studies of the MLQ revealed that there were two types of leaders: transformational and transactional leaders (e.g., Bass, 1995; Bass & Avolio, 1990). Four dimensions characterized transformational leadership: charisma or idealized influence (i.e., acting as a role model and gaining respect and trust from followers by communicating a vision), inspirational motivation (i.e., communicating a vision with enthusiasm thereby generating enthusiasm and optimism among followers), intellectual stimulation (i.e., encouraging followers to look at problems in innovative ways), and individualized consideration (i.e., providing personal attention for all followers; Bass, 1995; Bass, 1998; Bass & Avolio, 1994).

Idealized Influence

A leader displays *idealized influence* when he / she acts as a role model to followers through personal accomplishments and behaviours (Bass, 1985; Bass, 1990). The outcome is the admiration and respect of followers as a result of their persistent and capable attitudes (Alimo-Metcalfe & Alban-Metcalfe, 2001; Bass, 1985; Northouse, 1997). Idealized influence has also been referred to as a charismatic leadership factor (e.g., Northouse, 1997). The leader demonstrates charisma in which he / she engages in such behaviours as self-expression and ensuring behavioural consistency in order to motivate followers to identify with the organization's mission (Bass, 1990; House, 1976; Shamir, House, & Arthur, 1993). Such behaviours rely heavily on the verbal and nonverbal communication skills of the leaders (Shamir, Zaccay, Breinin, & Popper, 1998). Leaders who display idealized influence tend to set high moral and ethical standards to earn the trust and respect of their followers (Bass, 1985).

Inspirational Motivation

Inspirational motivation behaviours of leaders include emphasizing the importance of follower tasks, encouraging teamwork, encouraging high expectations for performance, and communicating those expectations by displaying confidence and energy to motivate their followers (Bass, 1985). Instilling an organizational vision and expressing enthusiasm and optimism tends to be characteristic of leaders who display inspirational motivation (Bass, 1985; Bass, 1990). Leaders who display inspirational motivation encourage their followers to share their vision of the organization (Bass, 1985). They often use symbolism and emotional attachments to inspire their followers to trade their own self-interests for the interests of the organization and / or group (Bass, 1985).

Individualized Consideration

A leader engages in *individualized consideration* when he / she pays attention to the developmental needs of their followers and treats them as individual persons (Bass, 1985). Listening, communicating, and mentoring to determine how to meet their followers' developmental needs accomplish this individual consideration (Bass, 1985; Bass, 1990). This leader focuses on providing feedback to followers and aligns the follower's needs with the mission of the organization (Bass, 1985).

Intellectual Stimulation

Intellectual stimulation occurs when the leader encourages their followers to think critically, question assumptions, and to deal with problems in innovative ways (Bass, 1985). Leaders who encourage intellectual stimulation are seen as supporting the creative thinking of their followers (Bass, 1985). Such leaders foster the development of problem-solving skills among their followers (Bass, 1985). They encourage imaginative thinking and the re-evaluation of values and beliefs (Bass, 1985).

Transactional leadership involves an exchange between the leader and the follower in that the leader rewards the follower for certain behaviours, such as good performance, and ridicules the follower for poor performance or lack of achievement (Bass & Avolio, 1990). The transactional leader motivates his / her followers by providing rewards or engaging in disciplinary behaviours (Bass, 1998; Bass & Avolio, 1994). Rewards may include financial incentives and organizational recognition (Bass, 1998). The motivation for followers to live up to their basic job expectations typically comes from such rewards (Bass, 1985).

In factor analytic studies of the MLQ, transactional leadership included two components: contingent reward (i.e., leader rewards or punishes follower based on follower's performance) and management-by-exception (i.e., avoids providing directions to followers if

current procedures are in place and are adequate; Bass & Avolio, 1990). An additional scale, *laissez-faire*, referred to the absence of leadership behaviours or inactive leadership was also included in the MLQ.

A leader engages in *contingent reward* when he / she rewards followers for acceptable behaviour and penalizes followers for unacceptable behaviour (Bass, 1998). Some research suggests that there are positive outcomes associated with this type of leader behaviour (e.g., Yukl, 1994). Contingent reward has been found to demonstrate positive correlations with transformational rather than transactional leadership (e.g., Avolio, Bass, & Jung, 1999; Bass, 1997; Bycio, Hackett, & Allen, 1995; Goodwin, Wofford, & Whittington, 2001; Wofford, Goodwin, & Whittington, 1998).

A leader who engages in *management-by-exception* only takes action when there is a problem to be solved or when basic standards are not met (Bass, 1985). Leaders who accept traditional methods of work, and permit followers to continue doing things in this traditional manner without encouraging new ways of solving problems, are those leaders who exhibit *management-by-exception* (Bass, 1990; Bass & Avolio, 1989). *Management-by-exception* has been divided into two types: active and passive (Hater & Bass, 1988). Those leaders who engage in active *management-by-exception* anticipate that problems may occur and take action to deal with problems (Hater & Bass, 1988). In contrast, leaders who engage in passive *management-by-exception* only act when the problem occurs, similar to *laissez-fair* leadership (Avolio et al., 1999; Hater & Bass, 1988).

Laissez-fair management, which is considered the most ineffective form of leadership, refers to a complete lack of transaction between the leader and the follower (Bass, 1998). That is, the leader tends to avoid engaging in decision-making activities and his / her roles as a leader (Bass, 1985). *Laissez-faire* leadership has also been referred to as *passive-avoidant* leadership because of the high correlations that have been found between this factor

and passive management-by exception (Avolio et al., 1999; Den Hartog et al., 1997; Yammarino & Bass, 1990). Research indicates that management-by-exception tends to be negatively correlated with transformational and transactional leadership (e.g., Bass, 1990). Overall, this leadership style is seen as being ineffective in the majority of situations (e.g., Den Hartog et al., 1997).

Benefits of Transformational Leadership Theory

There are many positive individual and organizational outcomes associated with transformational leadership such as, enhanced job satisfaction, increased organizational productivity, and decreased levels of stress among followers (Barling et al., 2000; Bass & Avolio, 1994; Kane & Tremble, 2000; Northouse, 1997; Roush & Atwater, 1992; Yammarino & Bass, 1990). Meta-analyses examining transformational leadership have demonstrated the effectiveness of this leadership style in both public and private-sector organizations (e.g., Fuller, Kester, & Stringer, 1995; Lowe, Kroeck, & Sivasubramaniam, 1996), and transformational leaders have been found to be more effective than transactional leaders (e.g., Sosik & Megerian, 1999; Yammarino & Bass, 1990). Bass (1990) argues that transformational leadership theory applies to all levels of an organization (see also Avolio & Bass, 1995), and this proposition has received support from studies examining the effectiveness of transformational leadership across different organizational levels (e.g., Atwater & Yammarino, 1993).

There are a number of reasons why the present review of emotional intelligence and military leadership utilizes the transformational theory of leadership. First, many researchers have emphasized the effectiveness of transformational leadership behaviours in military and para-military environments (e.g., Bass, 1990; Bass, 1998; Deluga & Souza, 1991; Fuller et al., 1995; Kane & Tremble, 2000; Lowe et al., 1996; Yammarino & Bass, 1990). The importance of transformational leadership was also highlighted in a document recently

released by the Canadian Forces (i.e., Officership 2020). Second, there are many positive individual and organizational outcomes associated with transformational leaders (e.g., Barling et al., 2000; Kane & Tremble, 2000; Lowe et al., 1996; Roush & Atwater, 1992). Third, transformational leaders adapt to changing circumstances, which is of particular importance in a military environment, and may utilize transactional strategies if deemed necessary for task or organizational effectiveness (Bass, 1985). Fourth, transformational leadership can be operationalized in terms of specific behaviours (e.g., Bass, 1985; Bass, 1990; Megerian & Sosik, 1996).

Emotional Intelligence & Transformational Leadership

The role of emotions in the leadership process has been a neglected area of research as a result of the belief that emotions may interfere with effective behaviours (George, 2000). Traditional theories of leadership suggested that leaders must plan and think rationally without the influence of their emotions (George, 2000). Researchers have made reference to the notion that transformational or charismatic leaders “emotionally engage their followers” and “display emotions” in order to motivate their followers to adopt the goals and values of the organization (e.g., Ashforth & Humphrey, 1995; Bass, 1998; Bass & Avolio, 1994; Conger & Kanungo, 1998; Shamir et al., 1993). Furthermore, leaders form an emotional attachment with their followers that enhance the quality of their relationships and the effectiveness of the team and organization (e.g., Bass, 1998). Effective processing of emotional information may help leaders to deal with complex ambiguous information by directing their attention to the issues or threats that require immediate attention (George, 2000). Furthermore, Bass (1990) suggested that there is a social or emotional element inherent in transformational leadership.

Researchers have questioned for many years what predisposes certain individuals to adopt a transformational style of leadership, and what makes some leaders more effective

than others (e.g., Barling et al., 2000; George, 2000; Judge & Bono, 2000; Mumford, Zaccaro, Johnson, Diana, Gilbert, & Threlfall, 2000). Several researchers have suggested that emotional intelligence may be a useful predictor of transformational / charismatic leadership behaviours (e.g., Barling et al., 2000; George, 2000; Goleman, 1995; Goleman, 1998; Sosik & Dworakivsky, 1998). However, there have been few attempts to determine the emotional processes involved in effective transformational leadership behaviours (e.g., Ashforth & Humphrey, 1995; Barling et al., 2000; Gates, 1995; Megerian & Sosik, 1996). The limited evidence suggests that emotional intelligence is positively associated with transformational leadership (i.e., idealized influence, inspirational motivation, and contingent reward; Barling et al., 2000)¹.

Nevertheless, the importance of social or emotional relationships are more evident in transformational versus transactional theories of leadership (Barling et al., 2000; Megerian & Sosik, 1996). Transactional leaders are reactive and do not tend to be concerned with engaging in interpersonal relationships with followers or being empathetic to follower's needs (Barling et al., 2000). The present review of emotional intelligence and leadership is concerned with effective leadership behaviours. Thus, in this paper, a theoretical link will be made between ability-based emotional intelligence (i.e., emotional perception, emotional facilitation / integration, emotional understanding, and emotional management; Mayer & Salovey, 1997) and elements of effective leadership as operationalized by the theory of transformational leadership (i.e., idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation).

Perceiving, Appraising & Expressing Emotions

A leader displays *idealized influence* when he / she acts as a role model to followers through behaviours and personal accomplishments in order to earn the respect and admiration

¹ In this study, Barling et al. (2000) used a mixed-model measure of emotional intelligence (i.e., EQ-i).

of followers (Bass, 1985). Leaders who possess the ability to perceive their own emotions and the emotions of their followers may be more effective at recognizing how their emotions can be used to earn the respect of their followers (Barling et al., 2000; George, 2000). Such a leader may utilize self-expression in order to accurately communicate, both verbally and nonverbally, the goals of the organization in order to earn the respect of followers (e.g., Shamir et al., 1993).

The leader's ability to accurately perceive, appraise, and express their own emotions and to perceive and appraise their follower's emotions may also result in the leader successfully communicating and *instilling an organizational vision* in followers (George, 2000). Individuals with heightened levels of emotional expression will more accurately express their beliefs and values to their followers providing followers with a greater understanding and identification with the organization's mission (e.g., George, 2000; Wasieleski, 1985). Emotionally intelligent individuals tend to be aware of their own emotions and moods (Mayer & Salovey, 1997). Research suggests that a leader with heightened self-awareness may be more effective at inspiring followers (e.g., Atwater & Yammarino, 1997; Bass & Yammarino, 1989; Fleenor & McCauley, 1996; Sosik & Dworakivsky, 1998). Leaders who possess heightened levels of self-perception have been shown to be more effective leaders (Roush & Atwater, 1992). When the leader accurately perceives his / her follower's emotions and responds appropriately, the followers may be more receptive (George, 2000).

Individuals with an ability to accurately express emotions may be more likely to communicate in an emotionally expressive manner (Mayer et al., 2000c). An organizational vision communicated in an emotionally expressive manner, rather than a technical manner, may be more appealing to followers (Megerian & Sosik, 1996). Transformational leaders

tend to arouse emotional responses in their followers in order to inspire them to believe in the organization's cause or mission (Bass, 1985).

The ability to perceive and express emotions may be of particular importance when a leader engages in *individualized consideration*. Leaders who are sensitive to the needs of their followers and can accurately read their followers' emotions may be more likely to identify areas in which their followers may need development, thereby increasing the effectiveness of the group and organization (e.g., George, 2000). Emotionally intelligent individuals tend to be aware of their emotions and the impact that their emotions have on others (Mayer & Salovey, 1997). Leaders who are self-aware tend to possess heightened levels of interpersonal control (Sosik & Megerian, 1999) and may be more empathetic toward followers' needs (Mayer & Geher, 1996; Sosik & Megerian, 1999). Individuals who can accurately read other people's emotions tend to be more effective at interpersonal interactions with co-workers (Mayer et al., 2000b). Research suggests that leader emotional expression tends to have an impact on both follower affect and perceptions of leader effectiveness (Lewis, 2000). When CEOs displayed an active negative emotion (i.e., anger) as opposed to a passive negative emotion (i.e., sadness) followers tended to have a higher level of nervousness and a lower level of relaxation (Lewis, 2000). Furthermore, leaders who engaged in a neutral emotional tone received higher leader effectiveness ratings from followers than those leaders who displayed anger or sadness (Lewis, 2000).

A leader engages in *intellectual stimulation* when he / she encourages followers to think critically and to derive innovative solutions for dealing with problems (Bass, 1985). Leader's who possess the ability to perceive their followers' emotions will be more effective at understanding how to encourage them to engage in imaginative thinking and creative problem-solving (Megerian & Sosik, 1996). Furthermore, knowing when to encourage creative thinking among followers may be dependent upon the leader's ability to perceive

and appraise emotional information (George, 2000). An effective leader recognizes that particular moods and emotions may hinder creative thought in followers and through perceiving and appraising their followers' emotions understand when it is appropriate to encourage creative thought in followers (George, 2000). Effective leaders possess the ability to accurately interpret non-verbal cues from their followers in order to determine the needs of the situation (George, 2000). It is important for leaders to be aware of followers' emotions in order to inspire them to solve problems (Barling et al., 2000; George, 2000). Emotional perception has been found to be associated with performance on a cognitive decision-making task that involved deciding on the order in which employees should be laid off in a hypothetical organization (Day & Carroll, 2002).

Using Emotions to Facilitate Thought

Leaders who engage in *idealized influence* may use their emotions in order to gain the respect and admiration of followers. Leaders who possess heightened levels of emotional intelligence may facilitate the experience of positive emotions in order to enhance the organization's functioning (George, 2000). In visualizing organizational improvements, leaders may earn the respect and trust of followers (George, 2000). Leaders who accurately appraise emotions may be more effective at utilizing emotional information to make decisions about how to gain the respect of their followers (George, 2000). Leaders use emotional content in stories and myths in order to communicate their values and beliefs to followers (Ashforth & Humphrey, 1995).

In order for leaders to *inspire and motivate* their followers, they may utilize emotions to enhance the cognitive processing of events or issues that pose a threat to the organization (George, 2000; Sosik & Megerian, 1999). In turn, this enhanced cognitive processing may result in the leader having a clearer vision of the organization's future (George, 2000). Using this emotional information a leader may be able to successfully promote this vision to

followers (George, 2000; Megerian & Sosik, 1996). Emotional information may be used by leaders to determine future courses of action (George, 2000). Furthermore, leaders use their emotions to promote a sense of optimism and enthusiasm among followers (Bass, 1985).

A leader displays *individualized consideration* when he / she acts as a mentor and supports followers. Effective leaders may use their emotions in order to promote the experience of positive emotions among their followers (George, 2000). Individuals with enhanced emotional integration skills possess the ability to use emotions to promote critical thinking (Mayer et al., 2000d). Thus, leaders who are skilled at using their emotions may be more effective at *intellectually stimulating* their followers. In addition, leaders may use their emotions to direct their attention and their followers' attention to the problems that need resolving and use them to prioritize tasks (George, 2000).

Understanding & Reasoning With Emotions

Understanding and analyzing emotional knowledge is important for leader's instilling *idealized influence* or a sense of trust and reverence in followers (Barling et al., 2000; George, 2000). Followers may perceive leaders who are adept at understanding their own and others' emotions as role models (Barling et al., 2000). Effective leaders possess the ability to understand emotional information and can use this information to elicit positive emotions in followers. In turn, followers may be more likely to identify with the leader's moral and ethical values (George, 2000).

Leaders who possess the ability to understand followers' needs and expectations may have an advantage in terms of *inspiring and motivating* followers (Barling et al., 2000). It is important for leaders to understand their followers' emotions in order to inspire them to solve problems (George, 2000). Furthermore, the more skilled at understanding the influence that the leader's emotions can have on followers in problem situations the more likely the leader is to successfully inspire followers to overcome challenges and organizational issues

(George, 2000). High emotional understanding individuals possess the ability to anticipate how others will respond in different situations (Mayer et al., 2000b). Accurate appraisal of followers' emotions and understanding why followers feel different emotions in different situations may result in the leader successfully conveying a sense of the organization's vision to followers (George, 2000).

Individualized consideration emphasizes focusing on follower needs and developmental goals (Bass & Avolio, 1994). Emotionally intelligent individuals possess the ability to be empathetic and to manage interpersonal relationships, thus it is expected that leaders with heightened levels of emotional intelligence would be successful transformational leaders (Mayer et al., 2000c). Bass (1990) suggested that transformational leaders possess the ability to understand and interact with their followers, and can accurately recognize their followers' needs by being empathetic. Bass (1998) indicated that those individuals with heightened levels of individualized consideration tended to have positive relationships with co-workers, subordinates, and clients, and had expressed an interest in helping others and encouraging others to discuss their problems.

A high emotional understanding leader possesses the ability to understand followers' emotions and to interact with followers in order to achieve their desired goals (Barling et al., 2000; George, 2000). A leader's ability to understand the impact that his / her behaviour can have on the emotions of their followers, and the ability to understand that certain situations may elicit particular emotional responses, would be important in situations in which the leader was providing feedback to followers. When a leader possess the ability to understand the emotions of their followers, he / she may be more likely to take care when providing criticism (Megerian & Sosik, 1996). Effective leaders possess the ability to distinguish between emotions that are genuine and those that are not genuine, and to distinguish between real emotions and expressed emotions (George, 2000). That is, understanding that followers

may not express their true feelings in certain situations in order to appear socially appropriate is important for effective leadership (George, 2000). In order to communicate with followers despite obstacles a leader must understand their follower's emotions and the impact that their emotions will have on their followers' well-being (Megerian & Sosik, 1996).

High emotional understanding leaders may also be more effective at *intellectually stimulating* their followers. Effective leader problem solving involves understanding people and social systems (Marshall-Meis, Fleishman, Martin, Zaccaro, Baughman, & McGee, 2000; Zaccaro, Mumford, Connelly, Marks, & Gilbert, 2000). Leaders who understand their own emotions and the emotions of their followers may be more skilled at solving problems and encouraging their followers to engage in problem-solving activities (George, 2000).

Managing / Regulating Emotions

A leader who possesses the ability to manage his / her emotions may be more likely to exercise self-control in problem situations thus earning the *respect and trust* of followers (e.g., Barling et al., 2000; Megerian & Sosik, 1996). High emotional management leaders possess the ability to adapt their behaviour to match their followers' emotional needs in order to gain the admiration and respect of their followers (George, 2000). Transformational leaders are said to engage in self-sacrificial behaviours in order to benefit the group and / or organization (Bass, 1985). Leaders who possess the ability to manage / regulate their emotions may be more apt to engage in self-sacrifice (Megerian & Sosik, 1996). A leader who displays self-discipline and self-control may be more likely to delay gratification and be more committed to his / her morals and values (Megerian & Sosik, 1996). Sosik and Dworakivsky (1998) found that ratings provided by subordinates on leaders' level of self-monitoring ability or ability to manage / regulate emotions was positively related to charismatic leadership behaviours. Leaders who can manage emotions in others may be successful at *instilling motivation and enthusiasm* in followers (George, 2000). Emotionally

intelligent individuals tend to manage emotions in oneself and others by regulating the expression of negative emotions and enhancing the expression of positive emotions (Mayer & Salovey, 1997).

Leaders' moods and emotions at work can have an impact on their followers. For example, George and Bettenhausen (1990) found that leaders' positive mood was positively associated with groups' prosocial behaviour and negatively associated with groups' turnover rate. Furthermore, George (1995) found that followers who were led by sales managers who experienced positive moods tended to provide higher quality customer service than those followers who were led by sales managers who did not experience positive moods at work. High emotional management leaders may be more likely to manage negative emotions in order to express positive emotions to their followers that will promote a sense of enthusiasm and optimism in a stressful situation (e.g., Goleman, 1995; Megerian & Sosik, 1996).

Effective leaders tend to engage in behaviours that result in their followers viewing them as self-confident and effective (House, 1995; Sosik & Dworakivsky, 1998). A leader who understands the impact that his / her emotions can have on behaviour would take action to modify their behaviour in order to portray a confident image. Leaders may engage in emotional self-regulation in order to regulate the feelings of their followers (Sosik & Dworakivsky, 1998). By successfully managing interpersonal relationships a leader may also be able to promote a collective effort among followers (Megerian & Sosik, 1996).

A leader who cannot successfully manage his / her emotions in complex situations may have difficulty focusing on the *needs of followers* (Megerian & Sosik, 1996). Leaders who are able to regulate their own emotions in order to attend to the needs of their followers may be viewed as more effective (George, 2000). For example, an effective leader would be able to detach themselves from the experience of negative emotions in order to support the needs of followers. Effective leaders possess the ability to successfully interact with their

followers (Bass, 1990) and tend to be skilled at relationship management (Megerian & Sosik, 1996). Warech and Smither (1998) found that leaders ability to monitor / regulate their emotions was positively associated with ratings of interpersonal effectiveness. High emotional management individuals also possess the ability to resolve conflict situations (Mayer et al., 2000b).

Intellectual stimulation involves questioning the status quo and developing new approaches to dealing with problem situations (e.g., Bass, 1998). Leaders who possess the ability to control their moods / emotions or express positive moods may be more likely to engage in creative and innovative thinking and to encourage this type of thinking among their followers (Isen, Daubman, & Nowicki, 1987). That is, by managing their emotions in order to promote the experience of positive moods / emotions, leaders may be more successful at engaging in innovative thought and problem solving (George, 2000; Sosik & Megerian, 1999). Leaders who possess enhanced emotional intelligence may be more adept at repairing their moods / emotions in order to engage in creative thought to improve organizational functioning (George, 2000). Furthermore, an effective leader possesses knowledge of the impact of their moods / emotions on their behaviour, and can modify their emotions to fit the needs of the situation (George, 2000).

A high emotional management leader may be more effective at intellectually stimulating followers as a result of utilizing positive emotions to promote enthusiasm and creativity among followers (Megerian & Sosik, 1996). Ciarrochi et al. (2000) found that individuals who scored highly on an ability-based emotional intelligence tended to retrieve positive moods when they were in both a positive and negative mood. Individuals who are in positive moods tend to provide more favourable evaluations, remember positive information, and provide more help to others (George, 1991).

Summary of Emotional Intelligence & Transformational Leadership

The importance of emotional abilities in the leadership process is apparent. Components of ability-based emotional intelligence appear to be conceptually related to elements of transformational leadership. Emotional abilities, such as emotional perception, emotional facilitation, emotional understanding, and emotional management, may predict the utilization of transformational leadership behaviours (e.g., Barling et al., 2000; George, 2000). However, this proposition has not been empirically examined in past research. The present review presented research addressing a conceptual link between ability-based emotional intelligence and transformational leadership.

Part 3: Future Research Initiatives & Recommendations

The purpose of this paper was to provide the CFLI with (1) an overview of emotional intelligence models and measures; and (2) an understanding of emotional intelligence in relation to military leadership. Despite the increased interest in defining and measuring emotional intelligence many questions remain unanswered and must be considered before emotional intelligence should be used for the selection and training of military leaders.

Future Research Initiatives

Drawing from the present review of emotional intelligence and military leadership, several areas of future research were identified. The lack of agreement among researchers on the definition of emotional intelligence poses problems for organizations. The question remains as to whether emotional intelligence is simply a re-labelling of already existing constructs such as personality and general cognitive ability. The abundance of constructs included in the mixed-model framework of emotional intelligence may predict many individual and organizational outcomes. However, labelling these constructs “emotional intelligence” is disingenuous because such constructs fail to meet the criteria for inclusion as a type of intelligence. Future researchers should examine the utility of mixed-model

emotional intelligence measures, such as the EQ-i, in predicting work outcomes beyond the influence of other well-established predictor variables, such as personality and general cognitive ability. Current evidence suggests that the EQ-i is not much more than a measure of personality and affect (e.g., Livingstone & Day, 2002; Newsome et al., 2000).

Further exploration of the psychometric properties of emotional intelligence measures is necessary. Before we can use emotional intelligence measures for decision-making purposes we need a thorough examination of the reliability and validity of these measures (Barchard, 2001; Hedlund & Sternberg, 2000). Accurate measurement of emotional intelligence may prove to be advantageous for the selection and training of military leaders (Barling et al., 2000). In particular, further examination of the procedures used to score ability-based emotional intelligence measures is warranted. The most common method of scoring ability-based emotional intelligence measures is by using consensus. Using this method, the participants' scores reflect the proportion of the normative group who endorsed a particular response. In this case, there is no right or wrong answer; rather, some answers are deemed as being *more* correct than others. Further research is needed to examine the accuracy of this scoring procedure.

Several researchers have suggested that emotional intelligence may be used by organizations to select effective leaders (e.g., George, 2001; Kobe, Reiter-Palmon, & Rickers, 2001). It is necessary to empirically examine ability-based emotional intelligence measures in relation to effective leadership behaviours in a military context. The present review outlined a conceptual link between emotional intelligence and transformational leadership suggesting that emotional perception, emotional facilitation, emotional understanding, and emotional management may be important for the prediction of transformational leadership behaviours. Future researchers should test these propositions at different levels within the military.

It is also important to determine the amount of emotional intelligence that is deemed appropriate for military leadership. By determining whether emotional abilities are important to successful leadership in a military context, through job analysis procedures, researcher may gain a greater understanding of whether emotional constructs would be useful for selection and training. According to Arvey et al. (1998) individuals should be selected on the basis of the match between the individual's level of emotional display and the degree of emotional display demanded by the organization. Developing assessment tools to determine the congruency between leader's emotional abilities and the emotional demands of the organization may prove to be beneficial (Arvey et al., 1998). Another related issue involves examining how much emotional intelligence is too much. Leaders who possess very high levels of emotional management / regulation may use these abilities for their own self-interests (Sosik & Dworakivsky, 1998). That is, they may manipulate followers through emotional regulation for their own personal benefit (Sosik & Dworakivsky, 1998). This question should also be addressed in future research.

A related concept to emotional intelligence is emotional labour (Ashforth & Humphrey, 1995; Morris & Feldman, 1996). Emotional labour involves "enhancing, faking, or suppressing emotions to modify emotional expression" (Grandey, 2000, p. 95). An individual engages in this regulation of emotional expression according to the "display rules" of the organization (Grandey, 2000). Research suggests that emotional labour may result in negative individual health outcomes (Morris & Feldman, 1996). Shaubroeck and Jones (2000) found that individuals who perceived that their job demanded them to express positive emotions tended to report more negative physical health symptoms. Future researchers should examine the impact of emotional management / regulation on the health and well-being of leaders.

Finally, the issue of training leaders to enhance their emotional intelligence should be examined in future research. Some researchers suggest that organizations may benefit from providing emotional intelligence training to leaders (e.g., Barling et al., 2000). However, the question remains as to whether emotional intelligence can be developed if it is a set of personality traits (Dulewicz & Higgs, 2000). Ambiguity regarding the construct validity of emotional intelligence makes it difficult to determine a starting point at which to determine if a leader's emotional intelligence needs development. This issue should be examined in future research.

Recommendations

It is recommended that the CFLI embark upon the following research initiatives:

Recommendation 1: Construct Validity of Emotional Intelligence

- The state of research on emotional intelligence is evolving. The CFLI should engage in efforts to monitor the current developments regarding the nature of the emotional intelligence construct. It is recommended that the CFLI focus their research efforts on the original conceptualization of emotional intelligence as a *mental ability* and move away from popular *trait-based* definitions of emotional intelligence. The ability-based model of emotional intelligence is in the early stages of development and may prove to be beneficial for the selection and training of military leaders.

Recommendation 2: Measurement of Emotional Intelligence

- The CFLI should consider the accuracy of the procedures employed to score ability-based emotional intelligence measures, and the use of self-report measures for the measurement of a type of intelligence.

Recommendation 3: Incremental Validity of Emotional Intelligence

- It is necessary to determine if emotional intelligence measures provide information beyond already well-established selection measures such as personality and general cognitive ability. It is recommended that the CFLI engage in research efforts to determine the incremental validity of mixed-model and ability-based emotional intelligence measures.

Recommendation 4: Criterion-Related Validity of Emotional Intelligence

- The CFLI should empirically examine the ability-based model of emotional intelligence (i.e., emotional perception, emotional facilitation, emotional understanding, and emotional management) in relation to effective leadership behaviours in the military. In doing so, the procedures used to score the ability-based measures should be considered.

Recommendation 5: Levels of Emotional Intelligence

- It is recommended that the CFLI examine the degree of emotional perception, emotional facilitation, emotional understanding, and emotional management required to be a successful military leader. Determining the emotional demands placed on military leaders is important to examine the extent which these emotional abilities are important to the success of military leaders. Furthermore, the CFLI should consider the impact of emotional management / regulation on the health and well-being of military leaders.

Recommendation 6: Selection & Training

- The CFLI should examine the utility and practicality of using emotional intelligence measures for the selection and training of military leaders upon further investigation of the definition and measurement of emotional intelligence.

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