

---

# Emotional intelligence and effective leadership

**Benjamin Palmer**

Organizational Psychology Research Unit, Neuropsychology Laboratory,  
Swinburne University of Technology, Hawthorn, Victoria, Australia

**Melissa Walls**

Organizational Psychology Research Unit, Neuropsychology Laboratory,  
Swinburne University of Technology, Hawthorn, Victoria, Australia

**Zena Burgess**

Organizational Psychology Research Unit, Neuropsychology Laboratory,  
Swinburne University of Technology, Hawthorn, Victoria, Australia

**Con Stough**

Organizational Psychology Research Unit, Neuropsychology Laboratory,  
Swinburne University of Technology, Hawthorn, Victoria, Australia

## Keywords

Intelligence, Effectiveness,  
Empirical study, Leadership,  
Training

## Abstract

Emotional intelligence has become increasingly popular as a measure for identifying potentially effective leaders, and as a tool for developing effective leadership skills. Despite this popularity, however, there is little empirical research that substantiates the efficacy of emotional intelligence in these areas. The aim of the present paper was to explore the relationship between emotional intelligence and effective leadership. Emotional intelligence was assessed by a modified version of the Trait Meta Mood Scale in 43 participants employed in management roles. Effective leaders were identified as those who displayed a transformational rather than transactional leadership style as measured by the multifactor leadership questionnaire. Emotional intelligence correlated with several components of transformational leadership suggesting that it may be an important component of effective leadership. In particular emotional intelligence may account for how effective leaders monitor and respond to subordinates and make them feel at work.

---

## Introduction

During the last decade interpersonal skills have become more integral to effective leadership (Goleman, 1998a). Where leaders were once seen to control, plan and inspect the overall running of an organization, in today's more service-oriented industries, leadership roles are also to motivate and inspire others, to foster positive attitudes at work, and to create a sense of contribution and importance with and among employees (Hogan *et al.*, 1994). These contemporary leadership requirements have placed new demands on leadership training programs to develop these skills in evolving leaders and on organizations involved in leadership selection to identify them in potential candidates (Fulmer, 1997). As a result, research has been exploring the underlying attributes and behaviours of leaders who successfully perform these contemporary leadership roles in order to identify leadership selection and training criteria for the recruitment and development of effective leaders (Church and Waclawski, 1998; Pratch and Jacobowitz, 1998; Ross and Offerman, 1997; Sternberg, 1997).

One variable that has recently gained much popularity as a potential underlying attribute of effective leadership is the construct of emotional intelligence (EI) (Sosik and Megerian, 1999). EI is described as a set of abilities that refer in part to how effectively one deals with emotions both within oneself and others (Salovey and Mayer, 1990). It has been proposed that in leadership, dealing effectively with emotions may contribute to how one handles the needs of individuals, how one effectively motivates

employees, and makes them "feel" at work (Goleman, 1998b). Today's effective leadership skills have been described to depend, in part, on the understanding of emotions and the abilities associated with EI (Cooper and Sawaf, 1997; Goleman, 1998a; Ryback, 1998).

Exactly how, and to what extent EI accounts for effective leadership is currently unknown. Despite much interest in relating EI to effective leadership there is little research published that has explicitly examined this relationship. Popular claims regarding the extent to which EI accounts for effective leadership skills are at present misleading. For example, one search firm claims "Emotional Intelligence accounts for more than 85 percent of exceptional performance in top leaders" (HayGroup, 2000). This finding is unlikely – there has never been a psychological variable that has made any such prediction in a century of research in applied psychology (Mayer *et al.*, forthcoming).

Despite the misleading nature of such claims, popular literature has sought to highlight the utility a priori, of this potential relationship, and drawn important theoretical links between EI and leadership performance. Knowledge regarding exactly how EI relates to leadership may lead to significant advances in leadership training and development programs, and the ability to select potentially effective leaders. The aim of the present study was to explicitly examine the relationship between EI and effective leadership.

The transactional/transformational leadership model (Bass, 1985; Bass and Avolio, 1990; 1994) and the "ability" model of

---

**Received: April 2000**  
**Revised/accepted:**  
**September 2000**

Leadership & Organization  
Development Journal  
22/1 [2001] 5–10

© MCB University Press  
[ISSN 0143-7739]

---

The research register for this journal is available at  
[http://www.mcbup.com/research\\_registers](http://www.mcbup.com/research_registers)

The current issue and full text archive of this journal is available at  
<http://www.emerald-library.com/ft>

EI by Mayer and Salovey (1997) provided an intuitive basis for which to examine this relationship. The ability model of EI is the most theoretically well clarified, being developed over a series of articles appearing in the 1990s (Mayer and Salovey, 1993; 1997; Salovey and Mayer, 1990). This framework conceptualizes EI as intelligence in the traditional sense consisting of a conceptually related set of mental abilities to do with emotions and the processing of emotional information. Mayer and Salovey (1997) have fully operationalized EI according to a four-branch hierarchical model from basic psychological processes to higher more psychologically integrated processes. These four core abilities of the model are further operationalized to include four specific skills related to each, forming a  $4 \times 4$  or 16 ability-based model of emotional intelligence (as diagrammed by Mayer and Salovey, 1997, p. 11).

In most organizational contexts, transformational as compared to transactional leadership is considered a more effective leadership style and is consistently found to promote greater organizational performance (Lowe and Kroeck, 1996). In the present study effective leaders were considered to be those who reported themselves as having a transformational rather than transactional leadership style (as measured by the multifactorial leadership questionnaire (MLQ) (Avolio *et al.*, 1995)). Transformational leadership is more emotion-based compared to transactional leadership and involves heightened emotional levels (Yammarino and Dubinsky, 1994). It is predicted that there will be a stronger relationship between EI and transformational leadership than between EI and transactional leadership.

If differences in EI were to be found between transformational and transactional leaders it could be argued that they would most likely been seen in the higher, more complex skills of EI. The ability to monitor emotions in oneself and others and the ability to manage emotions in oneself and others are claimed to be later developing and psychologically more complex abilities of EI (Mayer and Salovey, 1997). The present study measured EI in terms of these two abilities.

---

## Method

### Participants

The sample comprised 43 participants (ten females and 33 males) with a mean age of 37.5 years. These participants were past and current students of the Swinburne

University Center for Innovation and Enterprise Programs (CIE). Of the sample, 33 percent held higher management positions, 30 percent were middle level managers and 27 percent held lower management positions (10 percent of subjects did not classify themselves as falling within these categories). The average time employed in these current positions was 36 months.

### Materials

#### *Modified Trait Meta Mood Scale*

The ability to monitor and manage emotions in oneself and others was assessed by items taken directly and adapted from the Trait Meta Mood Scale (TMMS) (Salovey *et al.*, 1995). The TMMS is a self-report measure of individual differences in the ability to reflect on (or monitor) and manage one's emotions. The TMMS is a reliable scale (full scale reliability  $\alpha = 0.82$ ) and provides a valid index of what it purports to measure (Salovey *et al.*, 1995).

For the current study the ability to monitor and manage emotions in others was assessed by adapting items from each of the sub-scales of the TMMS. The ability to monitor emotions in oneself and others was assessed by 18 items pertaining to "oneself" and 12 adapted items pertaining to "others" from the attention and clarity sub-scales of the TMMS. In order to make the interpretation of results easier these sub-scales were combined to form a single sub-scale labelled emotional monitoring. The ability to manage emotions both within oneself and others was assessed by five items pertaining to the "self" and six items pertaining to "others" taken and adapted from the mood repair sub-scale of the TMMS. Again, to make the interpretation of results easier this sub-scale was labelled emotional management. In total, the modified TMMS (mTMMS) used in the current study comprised 41 items to which participants respond on a five-point Likert scale ranging from (1) strongly disagree to (5) strongly agree. This 41-item scale has demonstrated satisfactory internal consistency ( $\alpha = 0.73$ ) which was comparable to the TMMS from which it had been derived.

#### **The multifactor leadership questionnaire (MLQ)**

Leadership style was assessed with the MLQ (Avolio *et al.*, 1995). This self-report questionnaire consists of 45 items relating to the frequency with which the subject displays a range of leader behaviours. Five sub-scales assess transformational leadership behaviours and three sub-scales assess transactional leadership behaviours.

## Results

The means and standard deviations (SDs) calculated for the mTMMS and the MLQ are presented in Table I. The means and SDs for each of the variables in the MLQ were consistent with previous research (Avolio *et al.*, 1995). Intercorrelations among the variables are shown in Table II.

It was predicted that transformational leaders would be higher in EI than transactional leaders. This hypothesis was not supported; neither total transformational nor total transactional leadership ratings demonstrated significant correlations with either the emotional monitoring or emotional management scales of the mTMMS. However, there were significant correlations between some components of transformational leadership and the EI subscales.

Scores on both the idealized influence sub-scales (charisma) significantly correlated with scores on the emotional monitoring scale of the mTMMS ( $r = 0.44, p < 0.01$ ); however, they did not correlate with the emotional management scale ( $r = 0.27$  NS) (idealized influence active and behaviour respectively). Inspirational motivation was moderately correlated with both the emotional monitoring ( $r = 0.42, p < 0.01$ ) and emotional management ( $r = 0.37, p < 0.05$ ) scales. Similarly, individualized consideration also correlated with the emotional monitoring and management ( $r = 0.55, p < 0.01, r = 0.35, p < 0.05$ , respectively) scales. Intellectual stimulation did not correlate significantly with either of the EI scales. Finally there was a significant correlation between the contingent reward sub-scale of transactional leadership and the emotional monitoring scale ( $r = 0.41, p < 0.01$ ).

**Table I**

Means and standard deviations of the mTMMS and MLQ

	M	SD
<b>MLQ: total transformational</b>	3.10	0.63
Idealized influence (attributed)	3.02	0.54
Idealized influence (behavior)	3.10	0.65
Inspirational motivation	3.29	0.58
Intellectual stimulation	3.14	0.48
Individual consideration	3.22	0.44
<b>MLQ: total transactional</b>	1.85	0.48
Contingent reward	2.91	0.60
Management by exception (active)	1.60	0.77
Management by exception (passive)	1.18	0.58
<b>MTMMS: emotional monitoring</b>	112.56	10.86
<b>Emotional management</b>	37.38	3.44

**Table II**

Correlations among mTMMS and MLQ variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12
<b>1 TT</b>	–											
<b>2 IFA</b>	0.67**	–										
<b>3 IFB</b>	0.86**	0.37**	–									
<b>4 IM</b>	0.85**	0.50**	0.73**	–								
<b>5 IS</b>	0.51**	0.16	0.35**	0.17	–							
<b>6 IC</b>	0.86**	0.52**	0.70**	0.74**	0.33*	–						
<b>7 Ttr</b>	0.52**	–0.07	0.24	0.07	0.04	0.18	–					
<b>8 CR</b>	0.56**	0.24	0.57**	0.49**	0.20	0.57**	0.53**	–				
<b>9 MA</b>	–0.05	–0.01	0.01	–0.09	–0.03	–0.10	0.74**	0.09	–			
<b>10 MP</b>	–0.25	0.37*	–0.12	–0.26	–0.08	–0.10	0.51**	–0.07	0.07	–		
<b>11 EM</b>	0.26	0.44**	0.44**	0.42**	0.27	0.55**	–0.07	0.41**	–0.22	–0.14	–	
<b>12 EMA</b>	0.13	0.27	0.19	0.37*	0.16	0.35*	–0.13	0.23	–0.30	0.00	0.41**	–

**Notes:** \* =  $p < 0.05$ ; \*\* =  $p < 0.01$ ; TT = total transformational; IFA = idealized influence (active); IFB = idealized influence (behavior); IM = inspirational motivation; IS = intellectual stimulation; IC = individualized consideration; Ttr = total transactional; CR = contingent reward; MA = management by exception (active); MP = management by exception (passive); EM-EIQ = emotional monitoring; EMA-EIQ emotional management

## Discussion

While there was insufficient evidence to support the hypothesis that transformational leaders are higher in EI than transactional leaders, there were significant relationships between selected components of transformational leadership and the EI sub-scales. Specifically, the inspirational motivation and individualized consideration components of transformational leadership were significantly correlated with both the ability to monitor and manage emotions in oneself and others.

Those leaders who considered themselves to motivate and inspire subordinates to work towards common goals (inspirational motivation), reported that they monitored and managed emotions both within themselves and others. Similarly, those leaders who rated themselves as paying special attention to the achievement and developmental needs of subordinates (individualized consideration) also rated themselves as more likely to monitor and manage emotions both within themselves and in others.

The transformational component “charisma” measured by the idealized influence sub-scales of the MLQ correlated significantly and moderately with the ability to monitor emotions within oneself and others. Charisma and inspirational motivation describe transformational leaders who motivate and inspire their subordinates to work towards common goals (Bass, 1985). The present results suggest that one of the underlying competencies of these skills may be the ability to monitor emotions both within oneself and others. In addition, inspirational motivation appears to depend also on the ability to manage emotions.

The ability to monitor and manage emotions were both significantly related to the individualized consideration component of transformational leadership. Individual consideration describes leaders who pay special attention to the achievement and development needs of their subordinates. It involves, for example, sensing when a subordinate needs a more or less challenging task, or when a subordinate requires feedback (Yammarino *et al.*, 1993).

Sensing when a subordinate needs a more or less challenging task may depend on the ability to monitor emotions, i.e. monitoring when a subordinate is bored or frustrated with a given task. Similarly, sensing when a subordinate requires feedback may first involve monitoring and detecting the existence of emotions that suggest this need, but in this case, also managing their

emotions or feelings: for example monitoring and detecting feelings from subordinates such as not being appreciated for one’s work, and managing their emotions, perhaps by providing positive feedback so as to elevate feelings of not being appreciated. The ability to monitor and manage emotions may be part of the underlying attributes that manifest the individual consideration component of effective transformational leadership.

Intellectual stimulation was not found to correlate with either of the EI sub-scales. However, this does not mean that this transformational leadership component is not related to EI. Intellectual stimulation refers to the way transformational leaders stimulate their subordinates by presenting them with challenging new ideas and different ways to tackle old problems (Bass, 1985). This component of transformational leadership requires creative thinking and flexible planning (Avolio *et al.*, 1991). Creative thinking and flexible planning have both been associated with the EI construct, specifically with the ability to utilize and assimilate emotions in thought (Salovey and Mayer, 1990). Intellectual stimulation may be more reliant on other aspects of EI not assessed in the present study.

There was a significant positive correlation between the contingent reward component of transactional leadership and the ability to monitor emotions in oneself and others. However, contingent reward also correlated significantly with total transformational leadership and several of the transformational leadership components including idealized influence, inspirational motivation and individual consideration. Similar findings have been reported in previous research (Druskat, 1994). This suggests a possible limitation of the MLQ: perhaps “contingent reward” overlaps considerably with the transformational leadership components. The factorial validity of the MLQ has been questioned in previous studies (e.g. Carless, 1998).

Collectively, the findings of the current study suggest that EI as measured by the ability to monitor and manage emotions within oneself and others may be an underlying competency of transformational leadership. However, this notion should be approached with caution. The results are exploratory in nature and require replication with a larger, more diverse leadership sample, particularly as this was the first time that the TMMS had been adapted to include items that assessed self-perceived ability to monitor and manage emotions in others. An effective leadership sample from a diverse range of industries

across both private and public sectors may indicate whether EI is more or less important to effective leadership within certain industries or at different leadership levels. For example, it has been proposed that EI is an important underlying attribute of top level leadership (Cooper and Sawaf, 1997). Future research should examine the relationship between EI and effective leadership with a sample of effective leaders from different industries and from a number of different levels of leadership (i.e. top-level, middle and lower level leadership).

Future research in this area also needs to explore the relationship between EI and effective leadership in more depth, examining a wider range of EI abilities in particular whether relationships between the abilities of branch two of Mayer and Salovey's (1997) EI model and transformational leadership exist may be worth exploring. The abilities of branch two revolve around the use of emotion in thought, which is thought to contribute in part to creative thinking and flexible planning. Creative thinking and flexible planning may relate to the intellectual stimulation component of transformational leadership.

At present there are self-report measures of EI (like the one employed here) and performance based measures of EI such as the MSCEIT (Mayer *et al.*, 1999). Self-report measures of EI are described to assess a person's self-perceived EI rather than their actual EI. Relationships between ability and performance criteria are typically found to be more reliable and valid when assessed by performance based tests of ability rather than self-reports of ability (Mayer *et al.*, in press). The relationship between EI and effective leadership may be better established with performance based measures of EI; however, this issue needs to be empirically addressed.

The findings of the current study provide preliminary evidence for the relationship between EI and effective leadership. Understanding precisely how EI relates to effective leadership may have several implications for human resource practitioners and leadership search firms, particularly in the area of selection and leadership development. Specifically, aspects of EI identified as underlying attributes of effective leaders may provide additional selection criteria for identifying potentially effective leaders. Moreover, research on EI and effective leadership may identify new sets of emotion-based skills, which could be used in leadership training and development

programs to enhance leadership effectiveness. The knowledge gained from research into EI and leadership may increase the understanding of effective leadership and help produce powerful tools for the selection, and training and development of leaders, potentially enhancing organizational climates and performance.

---

## References

- Avolio, B., Waldman, D. and Yammarino, F. (1991), "Leading in the 1990s: the four Is of transformational leadership", *Journal of European Industrial Training*, Vol. 15, pp. 9-16.
- Avolio, B.J., Bass, B.M. and Jung, D.I. (1995), *MLQ Multifactor Leadership Questionnaire*, Mind Garden, Redwood City, CA.
- Bass, B.M. (1985), *Leadership and Performance Beyond Expectations*, Free Press, New York, NY.
- Bass, B.M. and Avolio, B.J. (1990), *Transformational Leadership Development: Manual for the Multifactor Leadership Questionnaire*, Consulting Psychologist Press, Palo Alto, CA.
- Bass, B.M. and Avolio, B.J. (1994), *Improving Organisational Effectiveness through Transformational Leadership*, Sage Publications, Thousand Oaks, CA.
- Carless, S. (1998), "Assessing the discriminant validity of transformational leader behavior as measured by the MLQ", *Journal of Occupational and Organisational Psychology*, Vol. 71, pp. 353-9.
- Church, A. and Waclawski, J. (1998), "The relationship between individual personality orientation and executive leadership behavior", *Journal of Occupational and Organisational Psychology*, Vol. 71, pp. 99-126.
- Cooper, R.K. and Sawaf, A. (1997), *Executive EQ: Emotional Intelligence in Leadership and Organisations*, Grosset/Putnum, New York, NY.
- Druskat, V.U. (1994), "Gender and leadership style: transformational and transactional leadership in the Roman Catholic Church", *Leadership Quarterly*, Vol. 5, pp. 99-119.
- Fulmer, R. (1997), "The evolving paradigm of leadership development", *Organisational Dynamics*, Vol. 25, pp. 59-73.
- Goleman, D. (1998a), "What makes a leader?", *Harvard Business Review*, Vol. 76, pp. 93-104.
- Goleman, D. (1998b), *Working with Emotional Intelligence*, Bloomsbury Publishing, London.
- HayGroup (2000), "Emotional intelligence: a 'soft' skill with a hard edge", [http://ei.haygroup.com/about\\_ei/](http://ei.haygroup.com/about_ei/)
- Hogan, R., Curphy, G. and Hogan, J. (1994), "What we know about leadership effectiveness and personality", *American Psychologist*, Vol. 49, pp. 493-504.
- Lowe, K.B. and Kroeck, K.G. (1996), "Effectiveness correlates of transformational and

- transactional leadership: a meta-analytic review", *Leadership Quarterly*, Vol. 7, pp. 385-426.
- Mayer, J. and Salovey, P. (1993), "The intelligence of emotional intelligence", *Intelligence*, Vol. 17, pp. 433-42.
- Mayer, J. and Salovey, P. (1997), "What is emotional intelligence?", in Salovey, P. and Sluyter, D. (Eds), *Emotional Development and Emotional Intelligence: Implications for Educators*, Basic Books, New York, NY, pp. 3-31.
- Mayer, J.D., Salovey, P. and Caruso, D. (1999), *Instruction Manual for the MSCEIT: Mayer-Salovey-Caruso Emotional Intelligence Test*, Multi-Health Systems, Toronto.
- Mayer, J.D., Salovey, P. and Caruso, D. (forthcoming), "Competing models of emotional intelligence", in Sternberg, R.J. (Ed.), *Handbook of Human Intelligence*, (2nd ed., Cambridge, New York, NY.
- Pratch, L. and Jacobowitz, J. (1998), "Integrative capacity and the evaluation of leadership", *Journal of Applied Behavioral Science*, Vol. 34, pp. 180-2.
- Ross, S. and Offermann, L. (1997), "Transformational leaders: measurement of personality attributes and work group performance", *Personality and Social Psychology Bulletin*, Vol. 23, pp. 1078-87.
- Ryback, D. (1998), *Putting Emotional Intelligence to Work: Successful Leadership Is More Than IQ*, Butterworth-Heinemann, Woburn.
- Salovey, P. and Mayer, J. (1990), "Emotional intelligence", *Imagination, Cognition and Personality*, Vol. 9, pp. 185-211.
- Salovey, P., Mayer, J., Goldman, S., Turvey, C. and Palfai, T. (1995), "Emotional attention, clarity, and repair: exploring emotional intelligence using the Trait Meta-Mood Scale", in Pennebaker, J.W. (Ed.), *Emotion, Disclosure and Health*, American Psychological Association, Washington, DC, pp.125-54.
- Sosik, J. and Megerian, J. (1999), "Understanding leader emotional intelligence and performance", *Group and Organization Management*, Vol. 24, pp. 367-91.
- Sternberg, R. (1997), "Managerial intelligence: Why IQ isn't enough", *Journal of Management*, Vol. 23, pp. 475-94.
- Yammarino, F.J. and Dubinsky, A.J. (1994), "Transformational leadership theory: using levels of analysis to determine boundary conditions", *Personnel Psychology*, Vol. 47, pp. 787-811.
- Yammarino, F.J., Spangler, W.D. and Bass, B.M. (1993), "Transformational leadership and performance: a longitudinal investigation", *Leadership Quarterly*, Vol. 4, pp. 81-102.