

Emotional intelligence and leadership in a South African financial services institution

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The purpose of this study was to determine whether there is a relationship between emotional intelligence and leadership effectiveness among senior leaders in a South African financial services organisation. The sample consisted of 973 participants. A convenience sample was used because the leaders were part of a strategic organisational initiative that included the completion of the measurement instruments used for the current study. The participants completed the Bar-On EQ-i, a measure of emotional intelligence, and the leadership effectiveness data were obtained from an organisation-specific Multi-rater that accessed self-ratings, peer and subordinate ratings, as well as manager ratings in terms of leadership behaviours linked to organisational worldviews of leadership effectiveness. Partially due to the large sample size, the results showed that there were statistically significant correlations between emotional intelligence and the leadership variables as measured for the leaders, but the prediction value between these variables was not practically significant.

Keywords: emotional intelligence, leadership, financial services institution, senior leaders, South Africa

1 Introduction and background

The global financial market crisis of 2008 and the subsequent transatlantic banking crisis demonstrated the inescapable fact that the world is an interconnected system. Stock markets and financial institutions were rocked, resulting in the need for the governments of the wealthiest nations to come up with rescue packages to bail their financial institutions out (Welfens 2009, 2011). The South African banking fraternity was similarly affected by these challenges during this period of transition (Chauhan 2012).

The complexities arising from the crisis and its aftermath increased the pressure on organisations and leadership to perform and placed a tremendous focus on the need to manage the blurring of boundaries (Gitsham & Pegg 2012; Leslie & Canwell 2010). How do organisations and leaders manage the paradoxes and cope with the complexities that arise under such circumstances while staying connected to that which is important for sustained business success?

Leadership experts generally support the role of emotional intelligence (EQ) in leadership effectiveness and various studies provide empirical evidence that high levels of EQ have a positive effect on leadership effectiveness (Collins 2001; Drucker 2008; Goleman 1995, 1998; Kerr, Garvin, Heaton & Boyle 2005; Leban & Zulauf 2004; Ruderman, Hannum, Leslie & Steed 2001; Van Oosten 2013). Nevertheless, some studies have failed to find any statistical significance for EQ in leadership effectiveness (Antonakis 2004; Barbuto & Burbach 2006; Brown, Bryant & Reilly 2006). The above-mentioned studies were conducted predominantly in an international arena and their relevance and applicability in the South African context require further investigation to allow an understanding of the dynamics at play and to determine whether there is a justifiable place for EQ in the development of leadership capacity towards increased effectiveness. The contribution of this article is therefore to shed further light on this debate in a South African context.

A number of studies have been conducted in the South African context (Astrup & McArthur 2011; Coetzee & Schaap 2005, Ramchunder & Martins 2014; Stuart & Paquet 2001; Vrba 2007) to explore the relationship between EQ and leadership. The conclusions drawn were that EQ relates significantly to leadership behaviour and to the outcomes of leadership that are considered either effective or ineffective in a rapidly changing environment. However, given

the level of interest in the subject – and the degree of vested interest organisations have in developing a resilient, sustainable and effective leadership capacity – sufficient practical research does not seem to have been undertaken in this field, and certainly not in South Africa specifically. The current study used a customised measure (the Multi-rater) of leadership that was embedded in a selected organisational context. Hence, the research presented is a unique contribution to the understanding of the relationship between EQ and leadership.

The South African financial services organisation in which this study was conducted is one of the four largest banking groups in South Africa. A period of bad strategic decision-making, a shortage of capital, an incorrect reading of interest rates and overinvestment in overseas markets put the organisation at risk of closure in 2003 (Financial Mail 2006; Leadership Magazine 2009). There was a clear understanding at the time that a shift in business context – and the challenge of survival, both nationally and internationally – would require a change in leadership, which conversely meant that an act of effective leadership would hopefully go some way towards restoring equilibrium (Carter 2009; Carter & Nussbaum 2010; www.valuescentre.com). In line with the work of Barrett (1998), Goleman (1995, 1998) and Bar-On (1997), EQ was regarded as a key factor for inclusion in the transformation process aimed at leaders. EQ was seen to be at the core of rebuilding and re-establishing the social fabric and psychological climate of the organisation. It was judged that a safe psychological climate in which people felt comfortable about questioning practices, admitting mistakes and voicing dissonance would be a vital contributor to the effectiveness of leadership (Hofmann, Morgeson & Gerras 2003). The decision to bring EQ into the area of leadership development was introduced specifically to support the transition from a mind-set focusing on numbers and general intelligence (IQ) to a mind-set that includes humanism, heart, EQ and, essentially, a whole-person approach (Carter 2009; Financial Mail 2006; <http://www.valuescentre.com>).

Hence, the purpose of this study was to determine whether EQ could be used as a positive and significant predictor of leadership effectiveness to validate the hypothesis. The results will be used by the organisation to strengthen the focus on EQ as a critical aspect of leadership development. The study will also add to the growing body of South African knowledge regarding the link between EQ and leadership.

2 Emotional intelligence

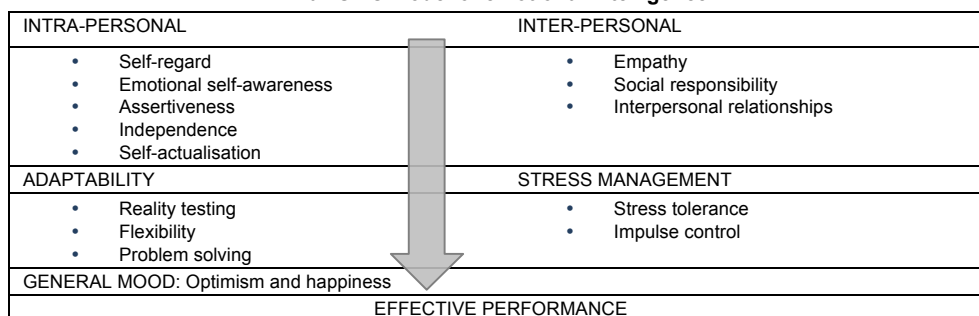
Over the past century, cognitive intelligence has been the point of departure in understanding individuals' functional capability and cognitive capacity, as well as being a predictor of potential. At the same time, however, characteristics other than intelligence which could satisfactorily explain variations in individual success have been explored (Bar-On 2010).

EQ, as a broad construct, addresses the emotional, personal, social and survival dimensions of intelligence (Goleman 1995, 1998). However, there seems to be both robust debate and lack of consensus around exactly what the definition of EQ should comprise (Dulewicz & Higgs 2000). Bar-On's (1997:14) non-cognitive model generically referred to EQ 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 (2002) referred to EQ as a construct and suggested that there is a significant overlap between many of the concepts that it involves. Based on his analysis, he referred to EQ as emotional and social intelligence. Bar-On's (1997) model is multi-factorial and relates to potential for performance and success, as opposed to performance per se. It is also considered to be process-oriented as opposed to outcome-oriented. The model outlined in Figure 1 below was expressly operationalised according to 15 conceptual components (emotional skills) pertaining to five specific dimensions of emotional and social intelligence.

Bar-On (2002) hypothesised that those individuals with higher than average EQs are, in general, better able to meet environmental demands and pressures. Furthermore, he proposed that a deficiency in EQ can mean a lack of success and the existence of emotional problems. In general, he considered emotional and cognitive

Figure 1
Bar-On's model of emotional intelligence



Source: Adapted from Stein & Book (2006)

intelligence to contribute equally to a person's general intelligence, which is an indicator of whether a person is likely to succeed in life (Bar-On 2002). A limitation of this model lies in its claim to measure some kind of ability through self-report items (Matthews, Zeidner & Roberts 2002). Furthermore, the Bar-On emotional-social intelligence model (EQ-i) (Bar-On 1997) has been found to be highly susceptible to the faking of responses (Day & Carroll 2008).

According to the seminal work of Salovey and Mayer (1990), emotions are fundamentally driving forces that arouse, direct and sustain activity. Stuart and Paquet (2001:30) postulated that "emotional health should also have some impact on the presence or absence of leadership ability".

3 Leadership

It is evident that a newly defined leadership concept is needed in the 21st century – one which replaces a single heroic leadership model (Avolio, Walumbwa & Weber 2009; Barrett 2006; Block 2008, 2012; Hamel & Breen 2007; Kellerman 2012; Rost 1993; Wheatley 2006). What is required is room for greater levels of collective leadership, with recognition for the follower relationship and shared dialogue.

The most recent leadership theories focus on the values and personalities of leaders, as well as on their relationships with others (Bass & Bass 2008; Northouse 2012). The current focus is on behaviours manifesting in the leader-follower relationship. Carter (2009) states that the organisation in this study could not look at the effectiveness of its leaders as separate from their context, given the bleak reality of the necessity for financial survival, and that it is necessary to understand that leadership effectiveness is moderated by the dynamics of context and the environment. Hence, the paradigm adopted by the organisation builds on the traditional models of leadership to include a more integrated, holistic and multi-level approach to leadership. These levels acknowledge intrapersonal, interpersonal, organisational and societal implications for leadership.

In this study, leadership is understood as a process and as a relational space in its essential nature. There is growing evidence of shared or collective leadership in organisations as hierarchical levels are dismantled and team-based structures are explored. Shared leadership is generally viewed as "a process versus a person engaging multiple members of the team" (Avolio 2007; Avolio et al 2009:431). According to Block (2008), this concept of leadership means that, in addition to embracing their own humanity, which is the responsibility of every individual, the core task of leaders is to create the conditions for civic or institutional engagement. The leader's task is to structure the place and experience of such engagement to move the culture towards shared ownership.

The critical constructs of leadership as being a contextually embedded construct (Veldsman 2002), strategy (Crossan, Vera & Nanjad 2008), a non-hierarchical process (Block 2008; Mintzberg 2009), values-based (Barrett 1998, 2006) and systemic (Collier & Esteban 2000), all of which underpin this perspective, formed the basis of the leadership paradigm measured in the organisational Multi-rater. The Multi-rater formulation was a culmination of these constructs in a customised and tailored 360-degree leadership assessment tool. Thus "leadership effectiveness" in the Multi-rater is a contextually and operationally defined construct that is embedded in the unique demands, dynamics and challenges facing the organisation midway through its recovery and turnaround journey.

4 Emotional intelligence and leadership

According to studies by Drucker (2008), Gardner and Stough (2002), Goleman (1995, 1998), Palmer, Walls, Burgess and Stough (2001) and Rosete and Ciarrochi (2005), there appears to be a relationship between EQ and leadership effectiveness. Furthermore, Goleman's (2004) research calculated the ratio of technical skills, IQ and EQ as ingredients of leadership effectiveness, and EQ proved to be twice as important as the others for jobs at all levels. There are, however different points of departure in the literature around the construct of leadership effectiveness and its measurement, with some research placing greater emphasis on EQ and leadership style.

According to Goleman (1998:94), leadership is more like an art than a science and "the most effective leaders are alike in one crucial way: they all have a high degree of what has come to be known as emotional intelligence". Further research conducted by Goleman, Boyatzis and McKee (2002) explored the role of EQ and leadership, highlighting certain neuroscientific links between people and the success and failure of an organisation. Nurturing emotions in the appropriate direction would increase leadership development and potential as well as overall effectiveness within the organisation (Goleman et al 2002).

The South African research of Coetzee and Schaap (2005), Ramchunder and Martins (2014), Stuart and Paquet (2001) and Vrba (2007) corroborates these supportive findings on the relationship between EQ and leadership, but research by De Miranda (2011) indicates that a relationship exists between some EQ subfactors and leadership effectiveness and not EQ as an overall factor.

Antonakis (2004) points out, however, that empirical evidence in support of the relationship between EQ and leadership remains weak, even after many years of research. Further research has reported no findings of statistical significance to demonstrate a relationship between EQ and leadership effectiveness (Barbuto &

Burbach 2006; Brown, Bryant & Reilly 2006).

Mills (2009) conducted a meta-analysis to ascertain whether there was empirical evidence to support the inclusion of EQ as a component of effective leadership. "Although claims of the paramount or essential value of EQ as a component of leadership may be overstated, it would appear that EQ is at least an important element in the exercise of effective leadership" (Mills 2009:26).

The objective of this study was to determine whether there is a relationship between the levels of EQ and leadership in leaders in a South African financial services institution and, furthermore, whether EQ and its components serve as predictors of effective leadership. This could have practical implications for personnel selection practices and the advancement of leaders in organisations.

5 Method

5.1 Research approach

The empirical study followed a non-experimental research design to determine the relationship between EQ and leadership. A quantitative approach to the study was used with a cross-sectional survey design to gather data on EQ and leadership effectiveness (Babbie & Mouton 2009). The responses were collected by means of convenience sampling and through an electronic survey.

5.2 Participants

The unit of analysis for the purpose of this research consisted of male and female senior leaders in a South African financial services institution with a total of 27 000 employees. The population in this study consisted of individual leaders in executive and senior-level management positions (N = 1800), geographically dispersed across all business units and disciplines. A non-random convenience sample was drawn based on their prior involvement in the organisational leadership development programme which required that they complete the measurements used in this study. A further requirement was that they held leadership positions that were part of the first phase roll-out on the programme. The sample was not created for the purposes of this study, but was accessible and approved for research purposes. The final sample consisted of 973 respondents. There were approximately twice the number of males (n = 629) as females (n = 344). The age data indicated that the youngest leader was 24 years of age and the oldest 64. The mean age was 40.77 (SD = 7.74); 7% of the respondents could not be categorised as their data could not be found on the system. The frequency distribution of the data is in line with expectations for people at that strategic level in the organisation. Since the organisationally embedded perspective of leadership is viewed as a values-based, non-hierarchical construct, further biographical variables specifically linked to race, organisational position and tenure were not deemed relevant.

5.3 Measuring instruments

The measuring instruments utilised in the empirical study were the Bar-On emotional-social intelligence model (EQ-i) (Bar-On 1997) and the 360-degree leadership assessment instrument designed specifically for the organisation by a panel of experts, namely the organisation Multi-rater. The necessary biographical data were extracted from these instruments.

The *Bar-On Emotional Quotient Inventory (EQ-i)* is a self-report measure designed by Bar-On (1997) to measure a number of constructs relating to EQ. The EQ-i consists of 133 items and takes approximately 30 minutes to complete. Items are answered using a five-point Likert-type scale where 1 indicates "very seldom or not true of me" and 5 "very often true of me". It gives an overall EQ score as well as scores for five composite scales, namely Intrapersonal, Interpersonal, Adaptability, Stress Management and General Mood. The composite scales are further broken down into 15 subscales (Bar-On 2006). The EQ-i does not measure personality traits or cognitive capacity, but instead measures mental ability to manage environmental demands and stresses successfully. The internal consistencies for the 15 subscales ranged between 0.69 and 0.86 with an overall average internal consistency of 0.76 (Bar-On 1997). South African norm data obtained and collated by Jopie van Rooyen and Partners, based on the results of 9892 respondents, indicate that the South African EQ-i norms appear stable and to measure the EQ constructs with an acceptable degree of internal consistency. The findings indicate that the norms also approximate a normal distribution. What emerged was that South African norms were significantly higher than North American norms across the majority of EQ-i scales. The EQ-i scales demonstrated acceptable-to-high levels of internal consistency in the South African sample. The scales were also moderately inter-correlated (Taylor 2006).

The organisation's locally designed *Multi-rater* was used to assess leadership. This is a customised 360-degree assessment with 59 items that focuses on the following six leadership themes: strategy, values-based leadership, organisational design, diversity/ transformation, delivery and execution, and good social citizenship. The questionnaire was developed to ensure a framework that integrated the desired shift in leadership behaviour and mind-set with the desired business change for the organisation. This framework acted as the "worldview" and was synthesised into "leadership themes", and then calibrated into behavioural statements. A

research psychologist was employed to ensure a statistically sound and robust process of instrument development. After testing reliability following an iterative process, the data stabilised at a Cronbach's alpha reliability of 0.97. A factor analysis was conducted and, initially, there were factor loadings that did not corroborate the leadership theme as classified in the statement list used for the Q-sort. Some statements were reworded in order to ensure that they were more closely aligned with the intended factor solution. After the Q-sort, reliability and validity testing, the panel reviewed the statements once more in order to ensure alignment with the worldviews and values. Once key stakeholders had signed off the questionnaire, it was web-enabled. Assessment required two levels: The respondent had to assess himself/herself on the instrument and the respondent had to be assessed by nine raters, namely the manager, peers/colleagues and direct reports/subordinates.

5.4 Research procedure

This study did not involve primary data collection because existing data were used for comparative analysis and study. Written permission and consent was granted by the CEO of the organisation to use the data and include them in this study.

An e-mail invitation was sent to participants by business unit heads outlining the overall programme, its purpose and rationale, explaining the self-assessment process used for the two questionnaires and explaining the nomination of raters for the Multi-rater. Participants were given a unique registration code to ensure the tracking of feedback. A project support team, external to the organisation, was used to electronically track and monitor participant and rater completion.

5.5 Statistical analyses

The statistical analyses were carried out in STATISTICA (StatSoft, Inc. 2011). Means, standard deviations, skewness and kurtosis were used to describe the univariate characteristics of the data. Cronbach's alpha was used to estimate the reliability of the measuring instruments. Correlations were calculated to investigate the presence of relationships (Babbie & Mouton 2009). Forward and backward selection multiple regression analyses were used to explore the relationships between the EQ scales and each of the leadership dimensions (Hair, Tatham, Black, Anderson & Black 1998).

6 Results

The descriptive data for both the independent variable (EQ) and dependent variable (leadership effectiveness) were calculated along with their various subscales. Table 1 presents the means, standard deviations, minimum and maximum scores, normalised skewness and kurtosis, test for non-normality and finally the Cronbach's alpha reliability coefficients for the EQ scales as self-reported by the respondents. The focus is on the five EQ scales and the total EQ score as well as on the six leadership scales and the overall/total leadership effectiveness score only. The EQ subscales were not included because they did not form part of this research and its aims. The results indicate that all the measures have acceptable to good levels of internal consistency, ranging from 0.72 to 0.96, which is higher than the accepted suggested cut-off point of 0.70 (Tavakol & Dennik 2011).

The Total EQ mean score of 103.19 (SD = 13.97) is comparable with the normative mean of the EQ-i, which is 100 (SD = 15) (Bar-On 2004). It is also comparable with the South African norm data, which reflect a Total EQ score of 104.63 (SD = 12.55). Finally, this is also comparable with all the scales in Table 1. The test for non-normality shows that several variables exhibited significant non-normality.

Table 1
Descriptive statistics for the EQ-i (n = 973)

Scale	Mean	SD	Min	Max	z (skewness)	z (kurtosis)	Significant non-normality (Kolmogorov-Smirnov test at 1% significance level)	Cronbach's alpha
Total EQ	103.19	13.97	55	138	-3.55	-1.36		0.96
Intrapersonal EQ	103.15	14.11	41	131	-6.92	1.04	Yes	0.93
Interpersonal EQ	99.82	14.01	48	134	-3.65	-0.89		0.88
Stress management EQ	102.52	13.05	62	137	-2.32	-0.54		0.84
Adaptability EQ	103.30	13.47	61	136	-0.99	-2.35		0.87
General mood EQ	101.71	13.00	41	130	-7.88	2.30	Yes	0.86

Table 2 reports the means, standard deviations, minimum and maximum scores, normalised skewness and kurtosis and Cronbach's alpha reliability coefficients for the organisational Multi-rater and leadership themes as rated by the participants themselves and their nominated raters. Some of the data were missing in the leadership variables, particularly in the diversity scale. However, the amount of missing data is very small (2% in the worst case). In these instances, cases with missing data were deleted for affected analyses. Again, the

results demonstrate appropriate levels of internal consistency, with Cronbach's alphas ranging from 0.75 to 0.94.

Skewness and kurtosis are used to assess whether data are normally distributed. A skewness value of zero implies a normal distribution (McNeese 2008). In Tables 1 and 2, all except two of the variables were significantly negatively skewed. Such distributions are typical of rating scales where many respondents are rated near the top of the scale, with few being rated negatively. This skewness results in several of the variables exhibiting significant non-normality. This has implications for the correlation analysis. Given the non-normality of several of the variables in this study, the decision to use non-parametric statistics for the correlations is justified, given that the use of Pearson's correlation was not appropriate since this assumes normality of the data. Instead, the non-parametric alternative, Spearman's rank correlation, was used (Babbie & Mouton 2009).

Table 2
Descriptive statistics for the leadership Multi-rater (n=973)

Item	N	Mean	SD	Min	Max	z (skewness)	z (kurtosis)	Significant non-normality? (Kolmogorov-Smirnov test at 1% significance level)	Cronbach's alpha
Leadership effectiveness Overall/Total	973	4.0	0.3	2.2	5.0	-10.57	11.76	Yes	n/a
Strategy	972	24.2	1.8	16.5	30.0	-3.38	2.80		0.75
Values-based leadership	969	91.0	5.8	68.7	108.0	-4.93	3.29		0.94
Organisational design	964	28.8	1.9	21.4	35.0	-5.69	3.48		0.87
Diversity/transformation	952	28.9	2.1	20.9	35.0	-5.22	3.04		0.84
Delivery and execution	965	54.5	3.6	39.1	65.0	-6.99	6.25		0.89
Good social citizen	962	15.4	1.5	8.0	20.0	-5.07	4.32		0.81

The correlations between the scales of EQ and leadership and their dimensions were computed. The matrix of intercorrelations between the dimensions measured by the EQ-i and the leadership Multi-rater is reported in Table 3. Almost all of the correlations were statistically significant, including many with very low correlation coefficients, but this is a result of the large sample size (Cohen 1977). Thus effect size needs to be considered to determine which correlations are really important. Cohen's (1977) guidelines for effect sizes for correlation coefficients were applied here. There were no correlations with large effect sizes or even moderate effect sizes between any of the EQ and leadership variables. All correlations indicated in Table 3 between the EQ and leadership variables represent small effect sizes.

Table 3
Spearman intercorrelations for the emotional intelligence dimensions of the EQ-i and the leadership dimensions of the Multi-rater (n = 973)

	TOTAL EQ	Intra-personal EQ	Inter-personal EQ	Stress management EQ	Adaptability EQ	General mood EQ	TOTAL Leadership effectiveness overall/Total	Strategy	Values-based leadership	Organisational design	Diversity transformation	Delivery and execution	Good social citizen
TOTAL EQ	1.00												
Intrapersonal EQ	0.92**	1.00											
Interpersonal EQ	0.72**	0.59**	1.00										
Stress management EQ	0.71**	0.54**	0.34**	1.00									
Adaptability EQ	0.87**	0.74**	0.50**	0.66**	1.00								
General mood EQ	0.81**	0.76**	0.62**	0.49**	0.61**	1.00							
TOTAL Leadership effectiveness overall/Total	0.15**	0.18**	0.06	0.08*	0.09**	0.16**	1.00						
Strategy	0.24**	0.26**	0.19**	0.14**	0.17**	0.24**	0.62**	1.00					
Values-based leadership	0.16**	0.13**	0.20**	0.13**	0.10**	0.13**	0.66**	0.74**	1.00				
Organisational design	0.17**	0.16**	0.19**	0.10**	0.12**	0.16**	0.62**	0.78**	0.84**	1.00			
Diversity transformation	0.15**	0.11**	0.21**	0.15**	0.09**	0.08*	0.47**	0.63**	0.82**	0.73**	1.00		
Delivery and execution	0.16**	0.20**	0.09**	0.06	0.12**	0.13**	0.71**	0.73**	0.75**	0.75**	0.53**	1.00	
Good social citizen	0.17**	0.13**	0.23**	0.12**	0.08**	0.15**	0.37**	0.60**	0.60**	0.62**	0.61**	0.45**	1.00

** Correlation is significant at the 0.01 level (two-tailed): $p < 0.01$

* Correlation is significant at the 0.05 level (two-tailed): $p < 0.05$

Each of the EQ scales, namely Intrapersonal, Interpersonal, Stress Management, Adaptability and General Mood, correlated strongly with the Total EQ scale and significantly with one another, ranging from a minimum of $r = 0.34$ ($p < 0.01$) to a maximum of $r = 0.87$ ($p < 0.01$). This result confirms previous correlation research findings (Bar-On 2004; Dawda & Hart 2000; Newsome, Day & Catano 2000) and suggests a moderate to high

practical significance (Cohen 1977). The strongest correlations were between Intrapersonal EQ and Adaptability EQ ($r = 0.74$; $p < 0.01$) and between Intrapersonal EQ and General Mood EQ ($r = 0.76$; $p < 0.01$).

The dimensions of leadership, namely Strategy, Values-based Leadership, Organisational Design, Diversity/Transformation, Delivery and Execution and Good Social Citizen, correlated strongly with the Total Leadership Effectiveness score and also yielded significant correlations with one another. The strongest correlations were between Values-based Leadership and Organisational Design ($r = 0.84$; $p < 0.01$) and between Values-based Leadership and Diversity/Transformation ($r = 0.82$; $p < 0.01$).

The relationship between the Total EQ and Total Leadership Effectiveness scores showed a small correlation ($r = 0.15$; $p < 0.01$), which indicates that senior leaders who display some levels of EQ also tend to manifest signs of leadership effectiveness. Cohen's (1977) effect size value suggests a small effect size. No statistically significant relationships emerged between Interpersonal EQ and Total EQ ($r = 0.06$), or between Stress Management EQ and Delivery and Execution ($r = 0.06$).

The highest correlations between the leadership dimensions and EQ scales can be highlighted. Total EQ was significantly correlated with Strategic ($r = 0.24$; $p < 0.01$). Intrapersonal EQ correlated significantly with Strategic ($r = 0.26$; $p < 0.01$). Interpersonal EQ correlated significantly with the leadership dimensions of Values-based Leadership ($r = 0.20$), Diversity/Transformation ($r = 0.21$; $p < 0.01$) and Good Social Citizen ($r = 0.23$; $p < 0.01$). Lastly, General Mood EQ correlated significantly with Strategic ($r = 0.24$; $p < 0.01$). Nevertheless, all of these represent small effect sizes.

In Table 4, the results of forward selection multiple regression analyses are provided with the scales of EQ as the independent variables and each of the dimensions of leadership used in turn as the dependent variable. The purpose of the regressions was to determine which EQ variables had a significant influence on each of the leadership variables, and also to determine the magnitude of the relationship between the independent and dependent variables.

In each case, forward and backward stepwise regression analysis was performed to select the best subset of independent variables for each dependent variable (Hair et al 1998). Prior to this, the diagnostics for the full model (the model including all the independent variables) were inspected for the effects of multicollinearity, of which there were none (Belsley, Kuh & Welsch 1980). Individual models were diagnosed for outliers, influential points and non-normality of residuals (Hair et al 1998). Apart from the removal of three to five outliers (depending on the particular model), no other problems with model fit were experienced. It was found that the results from the forward stepwise regression consistently produced models with the same or higher adjusted R^2 values compared with those from the backward stepwise regression. Hence, only the results of the forward stepwise regression were considered.

The model for Total Leadership Effectiveness was significant ($F(4,964) = 11.694$; $p < 0.0001$) with adjusted $R^2 = 0.042$. Intrapersonal EQ had the largest positive influence on Total Leadership Effectiveness ($\beta = 0.189$; $t = 3.22$; $p < 0.01$), followed by General Mood EQ ($\beta = 0.152$; $t = 2.90$; $p < 0.01$). The effect of Interpersonal EQ was the least important, and showed a negative relationship with Total Leadership Effectiveness ($\beta = -0.116$; $t = -2.84$; $p < 0.01$). However, the composite of three independent variables explained only 4.2% of the variability in the dependent variable.

For Strategic, the regression ($R = 0.28$) was statistically significant ($F(4,965) = 20.377$; $p < 0.0001$). The variables Intrapersonal EQ ($\beta = 0.198$; $t = 3.43$; $p < 0.01$) and General Mood EQ ($\beta = 0.101$; $t = 1.94$; $p < 0.05$) indicated a contribution that is significant for the prediction of Strategic, but accounted for only 7.4% of the variability in Strategic. For Values-based Leadership the regression ($R = 0.22$) was statistically significant ($F(3,963) = 16.614$; $p < 0.0001$). The variables Interpersonal EQ ($\beta = 0.204$; $t = 5.60$; $p < 0.01$) and Stress Management EQ ($\beta = 0.102$; $t = 2.43$; $p < 0.05$) indicated a contribution that is significant for the prediction of Values-based Leadership. However, they accounted for only 4.6% of the variability in Values-based Leadership. In the case of Organisational Design, the regression ($R = 0.20$) was statistically significant ($F(2,958) = 19.757$; $p < 0.0001$). The variables Interpersonal EQ ($\beta = 0.128$; $t = 3.21$; $p < 0.01$) and General Mood EQ ($\beta = 0.097$; $t = 2.44$; $p < 0.05$) indicated a contribution that was significant for the prediction of Organisational Design, but accounted for only 3.9% of the variability in Organisational Design.

The model for Diversity/Transformation was significant ($F(1,957) = 40.318$; $p < 0.0001$) with adjusted $R^2 = 0.068$. Interpersonal EQ ($\beta = 0.275$; $t = 6.80$; $p < 0.01$) had the largest positive direct effect on Diversity/Transformation, followed by Stress Management EQ ($\beta = 0.167$; $t = 3.96$; $p < 0.01$). The effect of General Mood EQ ($\beta = -0.096$; $t = -2.14$; $p < 0.05$) was the least important and showed a negative relationship with Diversity/Transformation. The composite of three independent variables explained only 6.8% of the variability in Diversity/Transformation. For Delivery and Execution, the regression ($R = 0.20$) was statistically significant ($F(1,957) = 4.0318$; $p < 0.0001$). Only one variable, Intrapersonal EQ ($\beta = 0.201$; $t = 6.34$; $p < 0.01$), indicated a contribution that was significant for the prediction of Delivery and Execution, but accounted for only 4% of the variability thereof.

Finally, for Good Social Citizen, the regression ($R = 0.28$) was statistically significant ($F(3,954) = 26.354$; $p < 0.0001$). The variables Interpersonal EQ ($\beta = 0.283$; $t = 7.83$; $p < 0.01$) and Stress Management EQ ($\beta = 0.117$;

$t = 2.83$; $p < 0.01$) indicated a positive influence on Good Social Citizen. Adaptability EQ ($\beta = -0.124$; $t = -2.74$; $p < 0.01$) effect was least important and showed a negative relationship with Good Social Citizen, accounting for only 7.3% of the variability thereof.

Table 4
Results of forward selection multiple regression analyses with the leadership dimensions total leadership effectiveness, strategy, values-based leadership, organisational design, diversity, delivery and citizenship as dependent variables and emotional intelligence subscales as the independent variables

Model	Non-standardised coefficients		Standardised coefficients Beta	T	P
	β	Std. error			
TOTAL Leadership Effectiveness					
Intercept	3.643	0.085		43.06	<0.0001
Intrapersonal EQ	0.004	0.001	0.189	3.22	0.0013
Interpersonal EQ	-0.002	0.001	-0.116	-2.84	0.0047
General Mood EQ	0.004	0.001	0.152	2.90	0.0038
	R = 0.22	R² = 0.05	Adjusted R² = 0.042		
Strategic					
Intercept	20.434	0.483		42.30	<0.0001
Intrapersonal EQ	0.025	0.007	0.198	3.43	0.000627
General Mood EQ	0.014	0.007	0.101	1.97	0.04933
	R = 0.28	R² = 0.78	Adjusted R² = 0.074		
Values-based Leadership					
Intercept	80.920	1.668		48.51	<0.0001
Interpersonal EQ	0.083	0.015	0.204	5.60	<0.0001
Stress Management EQ	0.044	0.018	0.102	2.43	0.0154
	R = 0.22	R² = 0.05	Adjusted R² = 0.046		
Organisational Design					
Intercept	25.713	0.494		52.05	<0.0001
Interpersonal EQ	0.017	0.005	0.128	3.21	0.0014
General Mood EQ	0.014	0.006	0.097	2.44	0.0149
	R = 0.20	R² = 0.04	Adjusted R² = 0.039		
Diversity/Transformation					
Intercept	25.039	0.621		40.33	<0.0001
Interpersonal EQ	0.040	0.006	0.275	6.80	<0.0001
Stress Management EQ	0.026	0.007	0.167	3.96	<0.0001
General Mood EQ	-0.015	0.007	-0.096	-2.14	0.0323
	R = 0.27	R² = 0.07	Adjusted R² = 0.068		
Delivery and Execution					
Intercept	49.411	0.817		60.48	<0.0001
Intrapersonal EQ	0.050	0.008	0.201	6.35	<0.0001
	R = 0.20	R² = 0.04	Adjusted R² = 0.039		
Good Social Citizen					
Intercept	12.448	0.433		28.77	<0.0001
Interpersonal EQ	0.030	0.004	0.283	7.83	<0.0001
Stress Management EQ	0.0134	0.005	0.117	2.83	0.0048
Adaptability EQ	-0.014	0.005	-0.124	-2.74	0.0062
	R = 0.28	R² = 0.77	Adjusted R² = 0.073		

7 Discussion

The objective of this study was to investigate the relationship between EQ and leadership in a sample of senior leaders in a South African financial services institution and to further understand whether EQ serves as a predictor of leadership for future leadership development purposes, thereby strengthening the lead indicators of leadership effectiveness. The South African financial services organisation concerned presents an interesting case for this, given its specific organisationally embedded perspective on leadership. Leadership is viewed as a values-based, non-hierarchical construct and builds on the traditional models of leadership to include a more integrated, holistic and multi-level approach and to acknowledge the intrapersonal, interpersonal, organisational and societal implications thereof.

Before the principal aims of the study were investigated, the reliability of the specific measuring instruments was assessed. The results indicated satisfactory Cronbach's alpha coefficients for the EQ-i and the organisational Multi-rater. Because the Multi-rater is an internally developed instrument, there was no external research available to validate the reliability results.

The subscales for both measuring instruments were highly interrelated, with the EQ-i showing intercorrelations ranging from 0.34 to 0.92 and the Multi-rater's subscales ranging from 0.37 to 0.84, both findings being supported by the research of Dawda and Hart (2000) as well as Ruderman et al (2001). It was

concluded that the EQ-i and the Multi-rater were reliable and valid for use in this study.

In order to fully understand the relationships between the variables of EQ and leadership, it is critical to first highlight the results of the descriptive statistics. All the variables except Stress Management EQ and Adaptability EQ were significantly negatively skewed. Such distributions are typical of rating scales where many respondents are rated near the top of the scale, with few being rated negatively (McNeese 2008). This skewness resulted in several of the variables exhibiting significant non-normality. This has implications for the correlation analysis. In considering the outcomes of the data and the fact that communication to the raters regarding the intent and purpose of the instrument was limited, it is possible that the Multi-rater could have been misinterpreted as a performance appraisal on the 360-degree review. The senior leaders had the context around the use and application of the Multi-rater, but in the nomination of raters this purpose may have been lost. Since raters in the organisation had recently emerged from a turnaround, and were then asked to rate a senior leader on their "leadership performance", a possible explanation for these skewed results lies in the impact of the halo effect or rater bias (Thiry 2009). When the results of the descriptive statistics are further interpreted, the most skewed scales on the self-report EQi are found to be those of Self-regard and Self-actualisation. Considering the fact that these are senior leaders in the organisation with a need for a good self-image and a perception of their own success for being in such positions through this turnaround, the conclusion one can draw is a positive impression or internalised halo effect on these subscales. The Bar-On EQi used in this study was a self-report questionnaire. Self-reported abilities and traits rely heavily on a person's self-understanding. If a person's self-concept is inaccurate, which given the above-mentioned context could have been the case, the self-report measures will yield information concerning the person's self-concept per se instead of the actual ability or trait in question.

The main aim of the study, namely to assess whether there was a statistically significant relationship between EQ and leadership, yielded a significant result. The Total EQ and Total Leadership Effectiveness relationship emerged as weakly correlated ($r=0.15$). Although the results reflect a relationship between the variables, they do not indicate a significant positive relationship between EQ and leadership. The instruments used in this study may have been inherently paradoxical measures, given a misalignment between the organisational leadership philosophy and practical intentions behind the measuring instruments, which in turn could have impacted the non-significant findings.

With reference to theoretical expectations that there may be a relationship between EQ and leadership effectiveness (Astrup & McArthur 2011; Coetzee & Schaap 2005; Gardner & Stough 2002; Goleman 1995, 1998; Stuart & Paquet 2001; Rosete & Ciarrochi 2005), the correlations between the variables/scales are significant, but weak, because there is no evidence that any of the variables in EQ account for any of the leadership variables. EQ may influence the leadership effectiveness of a senior leader but, by the same token, leadership effectiveness could be a contributor to EQ, or alternatively a third external variable may have an influence on the relationship between EQ and leadership, whereby senior leaders in the organisation have had more exposure to tertiary qualifications, more leadership experience and/or more leadership development and therefore manifest signs of higher EQ and leadership effectiveness.

Because of the nature of the organisation-specific leadership instrument, it was not possible to find similar comparative research. Hence, studies with the most similarities in terms of EQ and leadership are reported. Studies by Kerr et al (2005), Goleman (1995, 1998), Leban and Zulauf (2004), Rumchunder and Martins (2014) and Ruderman et al (2001) indicated a strong positive correlation between EQ scores and leadership effectiveness ratings. Contrary to the results of this research, the studies by Antonakis (2004), Barbuto and Burbach (2006) and Brown et al (2006) also reflected that EQ has no statistical significance in leadership effectiveness.

The findings of this research are corroborated by South African studies by Astrup and McArthur (2011), Coetzee and Schaap (2005), Stuart and Paquet (2001) and Vrba (2007), which found that EQ relates significantly to leadership behaviour and the outcomes of leadership that are considered either effective or ineffective in a rapidly changing environment. It is essential to distinguish between empirical research which reports strong significance between variables and can therefore serve as a predictive base, and weak significance that is not predictive in nature.

The results indicate that there is a relationship, albeit a limited one, between the dimensions of EQ and leadership. Correlational analysis indicates a relationship (with a small effect) between all of the EQ and leadership scales except between Interpersonal EQ and Total Leadership Effectiveness and between Stress Management EQ and Delivery and Execution, which yielded no statistically significant relationships. This is somewhat surprising given that interpersonal relationships (Interpersonal EQ) are hypothesised to be core to the construct of leadership (Total Leadership Effectiveness) as a relational construct within this study (Rost 1993). Furthermore, high levels of Stress Management EQ would seem essential in order to face the pressures of organisational expectations on Execution and Delivery of performance targets.

The strongest correlations between the leadership dimensions and EQ scales were Total EQ with Strategic, Intrapersonal EQ with Strategic and Interpersonal EQ with Good Social Citizen. Lastly, General Mood EQ correlates significantly with Strategic. Carter (2009) explained the leadership variable of Strategy in the organisational leadership philosophy as developing and contributing to strategy by accessing the community of

leaders and being aware of the social, political and economic factors that influence the environment in which the organisation operates; as well as providing a clear and compelling vision to inspire and align individual fulfilment and action. The Total EQ variable – as well as the variables of Intrapersonal and General Mood EQ – correlated most strongly with Strategy. When interpreting the relationship between these variables, a possible explanation is that those individuals who understand themselves and the way others feel are assertive, realistic and successful in realising the potential in situations, are able to solve problems and have an overall positive outlook on life. They can therefore generally create an uplifting and positive atmosphere in the workplace. It makes sense that individuals who are grounded in themselves, are optimistic and able to engage with those around them would be effective at implementing strategies to facilitate organisational change initiatives (Ruderman et al 2001; Stein & Book 2006). This gives them a sound ability to demonstrate the qualities of leadership they require to be strategic and visionary.

The role of citizenship is also a central construct in the organisational leadership philosophy. According to Block (2008), leadership means that, in addition to embracing their own humanity – which is the responsibility of every individual – the core task of leaders is to create the conditions for civic or institutional engagement. The leader's task is to structure the place and experience of such engagement to move the culture towards shared ownership. Being a Good Social Citizen as a leadership variable is connected to making business decisions that are grounded in strong ethics and that benefit the common good, as well as participating and encouraging others to become active in community-based initiatives (Block 2008; Carter 2009; Kellerman 2012). This can be achieved when an individual demonstrates responsibility and dependability along with good social skills. The findings of the relationship between Interpersonal EQ and being a Good Social Citizen demonstrate that an individual with strong interpersonal capacity can leverage, influence and harness the collective space effectively (Ruderman et al 2001).

The Diversity/Transformation variable and Values-based Leadership variable also correlated significantly with Interpersonal EQ. When interpreting the relationship between these variables, it might be postulated that leaders have empathy and a strong sense of value in terms of their social responsibility to connect with peers and subordinates in a way that enables a deeper understanding of the other, of their experiences, their challenges and the contributions they can make to organisational success (Barrett 2006). Leaders who understand the value of embracing diversity and of acting with integrity are possibly able to have more effective relationships with those around them and thus to be more successful in their leadership.

A sub-aim of the study was to establish whether EQ and its components could be viewed as predictors of leadership. The multiple regression analysis shows that very little of the variance of leadership can be predicted by EQ dimensions. The results show that Intrapersonal EQ, Inter-personal EQ and General Mood EQ explain 4.2% of the variance in Total Leadership Effectiveness. Whereas Intrapersonal EQ and General Mood EQ showed a positive regression to Total Leadership Effectiveness, Interpersonal EQ showed a negative regression. While these are relatively small values that do not provide conclusive support of the research argument, the regression models were, nonetheless, significant. No other studies were found to support this finding.

An important factor in this study is the nature of the measurement of leadership. The Multi-rater is an instrument that sets out to measure a meta-perspective of leadership rather than an individual perspective as highlighted by the organisational leadership paradigm. Hence, using only EQ as a predictor of leadership effectiveness is counter-intuitive to what the Multi-rater is trying to elicit.

8 Conclusions

The general aim of this research was to determine whether there is a relationship between the EQ of senior leaders and their leadership effectiveness. Although the results do not indicate a predictive relationship between EQ and leadership, the findings of this study indicate that leaders in the South African financial services institution studied who demonstrate high levels of EQ are also regarded as effective leaders. Although these results fail to support some of the more extreme claims of EQ proponents concerning the potential role of EQ in effective leadership, they do not rule out the possibility that EQ may play an important role. It is evident that this study cannot clarify this relationship further, but that it merely adds to the South African body of knowledge. Certainly, the relationship between EQ and leadership may be far more complex than expected.

9 Limitations of the research

Although the research aims of this study were met, it has some limitations. A shortcoming of this study was the fact that it was conducted in one nationwide organisation with executive and senior leaders and that it used a customised leadership measure. The results of the study are therefore not generalisable across other organisations, nor to the wider organisation at lower levels of leadership. A second shortcoming was the limited sample statistics available to report. This was due to specific organisational leadership perspectives that precluded the inclusion of any biographical information beyond age and gender in the data collection process. Thirdly, a cross-sectional design was used, with the result that no causal relationship between the variables could be determined over a period of time. Furthermore, the use of self-ratings in both questionnaires is a huge limitation as subjectivity can play a role in the results – and therefore the findings – of such a study. Finally, it is

suggested that future studies should attempt to investigate the moderating variables affecting this relationship.

10 Recommendations

A recommendation for future use of the Multi-rater in this organisational context for the purposes of leadership development would be to ensure even more appropriate communication and briefing around the purpose, intention and application of the measuring instrument, thereby ensuring that all raters are enabled and equipped to be efficient. The Bar-On EQ-i is an individual self-report instrument reporting data rooted in an individualist orientation (Bar-On 1997). Given the organisational leadership paradigm, it may not be a fit-for-purpose measuring instrument in this instance. An EQ assessment grounded in a more collective measure might be more appropriate.

11 Suggestions for future research

In order to test possible generalisations of this study for South African leadership, future research should include a broader sample of the organisation, other financial services organisations and, possibly, other industries. It is also recommended that leadership ineffectiveness should be investigated to determine whether the converse of the findings applies. Finally, longitudinal research, post the leadership development interventions identified, should be used in future to identify and isolate causal factors and to ensure that environmental factors impacting on the data can be isolated and meaningfully incorporated.

Further research needs to be conducted in order to expand knowledge of the possible influences or effects that EQ may have on leadership. It would be interesting to see the differences in leaders' self-perceptions versus those of others and/or possibly to include a Multi-rater for the EQ measurement.

12 Practical implications of the research for practitioners

The results of this study should engage personnel practitioners in diverse organisations to investigate possible connections between leadership and other key effectiveness factors. A solid South African theoretical foundational basis (empirically tested in practice) of key components related to effective leadership could certainly enhance strategic personnel decisions regarding the selection, placement and development of senior management.

Because leadership is one of the most critical aspects management and organisations have to deal with, investing training in leadership effectiveness and sound principles associated with EQ would certainly benefit potential and existing leaders on all levels. Personnel practitioners should endorse learning organisation principles and implement systems that allow leaders to experiment with leadership effectiveness skills and effective emotional intelligence practices. Monitoring processes should be available and feedback given to candidates willing to engage in experimental activities aimed at enhancing leadership and EQ over time.

Enhanced leadership qualities based on effective emotional intelligence will positively impact on employment relations in the workplace. Leaders with refined EQ skills would for example be able to manage tricky labour relations negotiations more effectively than those with limited EQ abilities. From an organisation's perspective, the support of top management is crucial in respect of initiatives proposed by human resources practitioners who intend to invest money and time in training, development and coaching that could benefit current and potential leaders. Early investment in leadership and EQ skills capacity development would certainly pay off over the long term. Finally, the organisation and its workers would ultimately benefit from these corporate investments. Surely all organisations should regard this as an ethical consideration and even an obligation?

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