



Emotional Capital Report

ECR™ & ECR 360™

Technical Paper
2010

Prepared by
Martyn Newman, PhD., DPsych.

RocheMartin®

Executive Summary

The Emotional Capital Report (ECR™) represents an innovation in the measurement of leadership behaviors. It is an exciting advance in our understanding of the building blocks that are scientifically linked to the behaviors of successful leaders. The ECR™ and ECR 360™ provide an efficient, valid assessment of an individual's emotional intelligence and produce four reports:

The *Emotional Capital Report*™ and *Summary Report* are leadership development tools that provide professional people with a comprehensive interpretation of their leadership potential based on their emotional intelligence. The reports include: a global Total Emotional Capital score; an individual's scores on 10 emotional and social competencies linked to effective leadership and a validity scale that measures positive response bias. The *Emotional Capital Report* also provides narrative descriptions of the leadership behaviors associated with each score; coaching strategies for developing emotional intelligence and leadership, and an action plan for designing a personal blueprint to build emotional capital.

The ECR *Selection Report*™ is an effective tool for talent identification and selecting high-performing employees. In addition to providing scores on the ten emotional and social competencies of emotional intelligence, the *Selection Report* provides a guide to the interpretation of scores that can be explored during a behavioral interview. The interaction of high scores and low scores are explored in light of their potential impact on performance and key follow-up questions are presented to guide the interview. A Summary Evaluation provides an opportunity to evaluate the level of confidence in the candidate's emotional intelligence profile as well as an opportunity to make recommendations.

The ECR is also available in a multi-rater edition – the ECR 360™ *Multi-Rater Report*. The ECR 360™ uses an online multi-rater method and, through the combination of responses from colleagues, an individual's scores are compared to 'Rater' scores to yield a gap analysis and an understanding of differences in self/other perception. A Coaching Section examines those particular factors where 'Self' scores and 'Rater' scores are significantly different and provides coaching strategies for improving leadership performance.

Distinctive Benefits

The ECR™ and ECR 360™ are brief, simple-to-use measures that can be completed online in only ten minutes. They produce state-of-the-art leadership reports of an individual's leadership potential based on their emotional intelligence. In addition to the general features of the ECR, there are distinctive advantages to using this inventory:

- A large international normative database of 3,240 professional people, including participants from Europe, Australia and the USA ensures a broad representation of leadership norms
- 10 multidimensional factors specifically linked to effective leadership and representing the five general domains of EQ facilitates comparison across all validated models of emotional intelligence

- A validity indicator – the Positive Impact Scale - designed to identify response bias and increase the accuracy of interpretation
- Very good statistical reliability and validity provides increased confidence in the dependability and quality of the profile
- Four report options, including a brief Summary Report that provides a quick, cost-effective snapshot of scores; a comprehensive leadership report designed to provide practical strategies for building EQ and leadership success; a 360 Multi-Rater Report presents a broader evaluation of leadership performance; a Selection Report provides an effective tool for talent identification and selecting high-performing employees
- A range of supporting resources including: an internationally acclaimed book describing the business philosophy of emotional capital; *Emotional Capitalists – The New Leaders*, a three-day certification workshop, online coaching modules, and a comprehensive one-day training workshop in EQ and leadership
- The leadership model chosen by the European Union and fast becoming the EQ model for training government agencies in EQ and leadership skills across the European states

Applications

Leadership Development

The ECR is very versatile in business environments. It supplies accurate multifaceted information about an individual's potential performance across a range of skills correlated with effective leadership and management. As such, it is an ideal tool for use in leadership development programs. Of course, when we speak of leaders we are not just referring to a single individual. Leadership is distributed. In a certain sense, everyone is a leader because everyone is always trying to get people to buy-in to what they are doing. True leaders do not practice leadership; they live leadership. They are what they do.

Selection and Recruitment

The ECR can also be used by employers, (via HR and OD consultants, psychologists, or ECR certified personnel), as an assessment tool in selecting emotionally intelligent and potentially successful personnel. Supplemented with other sources of information such as interviews and the results of other assessments, the ECR can make the recruitment and selection process more reliable and efficient.

Team Building

In addition to identifying high potential employees in the selection and recruitment process, the ECR is also useful in group or team development. A large part of effective teamwork is knowing each member's strengths and weaknesses and leveraging those strengths whenever possible. Pinpointing and sharing this kind of information can prove to be an empowering experience that unifies, synchronizes, and strengthens the group. This enables qualified professionals to create tailor-made development programs to improve the emotional skills and functioning of employees across the organization.

About the Authors

Dr Martyn Newman received his PhD., from the University of Sydney and holds an MA., from GTU at the University of California, Berkeley, a Masters of Psychology from Monash University, Melbourne, and a Doctor of Psychology from La Trobe University, Melbourne.

He is a consulting psychologist with an international reputation as an expert in emotional intelligence and leadership. Dr Newman has held academic posts as Senior Lecturer at the University of East London and the School of Psychology, ACU National. He is regarded as a leading Australian authority on applying emotional intelligence to business challenges. Dr Newman is the author of *Emotional Capitalists - The New Leaders*, and the *Emotional Intelligence Sports Inventory* - the world's first psychological inventory to measure how emotional intelligence competencies support elite sports performance.

His research in psychological assessment has been published by the American Psychological Association and his lectures and seminars on leadership entitled: *Emotional Capitalists - The New Psychology of Emotional Intelligence and Leadership*, have been widely acclaimed in Europe, Asia and Australia.

Dr Newman has worked as an executive coach and advisor to senior people at many leading companies such as Boeing, BP, ExxonMobil, AXA, Foster's, GlaxoSmithKline, and Quiksilver among many others, to improve the performance of their people and organization. He is currently an executive coach to ExxonMobil and has consulted to the European Union and the Bulgarian Government's Ministry of Finance, assisting them to develop leadership excellence. Dr Newman lives between London and Melbourne.

Judy Purse MAPS., is a corporate psychologist widely regarded for her business experience and strong background in designing and delivering professional development profiles and performance reviews for organizations. Judy has developed a number of psychometric instruments and reports, and recently designed, developed and delivered psychometric surveys for organizations such as Foster's, Quiksilver, C&C Group (Ireland), and Village Roadshow.

RocheMartin Pty Ltd.
1 Emerald St, South Melbourne
Victoria 3205 Australia
Tel. +61 3 9525 5252 E. contact@rochemartin.com

The Challenge

There is a growing body of evidence that the set of social and emotional competencies that constitutes what is now commonly referred to as emotional intelligence (EQ) play a key role in determining success in both personal and professional life. Recent research has identified links between specific components of emotional intelligence and particular behaviors associated with leadership effectiveness. High levels of emotional intelligence in these areas can help predict leadership success because they enable a person to manage their own emotions well and manage the emotional needs of other people. To date, most empirical research has utilized either the Goleman or Bar-On models of emotional intelligence. Yet, neither of these models and their associated tools were specifically designed to measure leadership behaviors. The challenge was to design a scientifically valid psychometric tool that would accurately measure the specific EQ competencies linked to effective leadership performance.

Emotional Intelligence

To date, there are several approaches to describing emotional intelligence (EQ). Contemporary theorists like Peter Salovey and John Mayer (1990) were the first to publish scientific articles in peer-reviewed journals. Their theory of EQ was framed within a model of *intelligence* and referred to a constellation of *abilities* through which people dealt with their own emotions and those of others (Salovey & Mayer). Reuven Bar-On (2000) claims to have used a related concept – emotional quotient – still earlier and placed emotional intelligence within the context of personality theory as a model of *well-being*. Bar-On defined 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*” (p. 14).

Of course, Daniel Goleman (1995, 1998, 2001) has clearly been the most influential in popularizing the concept. Goleman (1998) formulated EQ in terms of a theory of *performance* based on emotional competencies and although he has attracted widespread criticism that his definition of emotional intelligence is sweeping and over inclusive, his work has provided many valuable ideas for conceptualizing emotional intelligence (Mathews, Zeidner & Roberts, 2004).

Together, these three models represent the current major conceptual models of EQ (Spielberger, 2004). At the most general level, all three models share a common core of basic concepts that refer to the ability to recognize and regulate emotions in ourselves and in others.

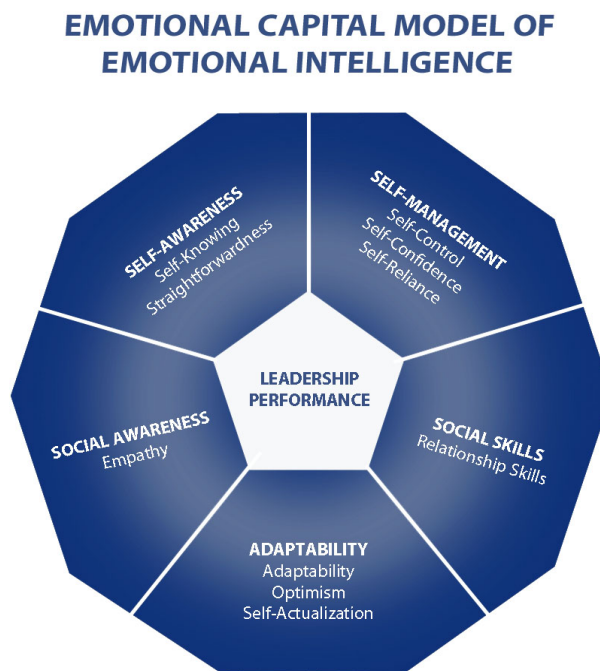
Emotional Intelligence and Leadership

The relationship between EQ and leadership was described for the first time in a *Harvard Business Review* article by Goleman (1998b) in an article entitled, “What makes a Leader?” The article described the importance of EQ in leadership success and cited several studies that demonstrated that EQ is often the distinguishing factor between great leaders and average leaders.

Over the last ten years numerous research findings have shed light on the impact of EQ on leadership success. The findings from these empirical studies have described twenty

emotional and social competencies related to leadership success, including twelve from the Bar-On model and eight from the Goleman model (Newman, 2007). Once these competencies are examined for their similarity of content – convergent validity – and rationalized, ten distinct factors emerge that form the basis of a distinctive model of EQ that pertains to effective leadership – emotional capital (see Figure 1.0).

Figure 1.0



The Emotional Capital Model consists of ten factors that contain content from all four major domains of EQ and forms the basis for the development of the leadership tool - the *Emotional Capital Report*.

Emotional Capital - A New Psychology of Leadership

The research in psychology and leadership referred to above points to a set of emotional and social competencies that underpin effective leadership. This research challenges the conventional wisdom that good leaders use their authority to dominate followers and tell them what to do by enforcing compliance. And, the idea that effective leaders can use their charismatic personalities to manipulate others into conformity appears to be an anachronism. A new picture of leadership has emerged that better accounts for leadership performance.

This new psychology of leadership suggests that leaders with a certain set of emotional and social skills are most effective at influencing followers. This influence has been described in terms of emotional capital, and leaders who possess high levels of emotional capital as, emotional capitalists (Newman, 2007a). Through the exercise of these

emotional skills, emotional capitalists create value and influence through their capacity to identify with the emotional experience and aspirations of their people, and build shared identities with them. Accordingly, they are able to establish trust, understand people's need to belong to a group, create and communicate compelling visions, develop blueprints for action and lead through their ability to motivate people to act together in concert. In short, emotional capitalists represent leaders with the advanced capacity of being able to guide people to action from within by engaging the prime movers of behavior – emotions.

Emotional Capital Competencies

More than a decade of empirical research has identified ten EQ competencies characteristic of successful leaders. These competencies are measured by the ECR and leaders with these skills are characterized by:

Self-Knowing – the capacity to recognize how their feelings and emotions impact on their personal opinions, attitudes and judgements.

Self-Confidence – the ability to respect and like themselves and be confident in their skills and abilities.

Self-Reliance – the emotional power to take responsibility for themselves, back their own judgments and be self-reliant in developing and making significant decisions.

Straightforwardness – the ability to express their feelings and points of view openly in a straightforward way, while respecting the fact that others may hold a different opinion or expectation. They are comfortable challenging the views of others and give clear messages.

Self-Actualization – the ability to manage their reserves of emotional energy and maintain an effective level of work/life balance. They appear to thrive in setting challenging personal and professional goals and their enthusiasm is likely contagious.

Relationship Skills – the knack for establishing and maintaining collaborative and rewarding relationships characterized by positive expectations.

Empathy – the ability to grasp the emotional dimension of a business situation and create resonant connections with others.

Adaptability – the ability to adapt their thinking, feelings and actions in response to changing circumstances. They are tolerant of others and receptive to new ideas and consider different points of view.

Self-Control – the ability to manage their emotions well and restrain their actions until they have time to think rationally. They are able to stay calm in stressful situations and maintain productivity without losing control.

Optimism – the ability to sense opportunities even in the face of adversity. They are resilient, can see the big picture and where they are going and are able to focus on the possibilities of what can be achieved.

The Science

Psychometric Properties

Normative Data, Reliability and Validity

Psychometrics is concerned with the scientific measurement of psychological theory and the techniques involved in psychological measurement. This information is important because it establishes the accuracy, dependability, and quality of a psychological inventory. In the process of developing the ECR, normative data was collected and psychometric analyses were conducted to obtain information on its reliability and validity. Norms are important because they establish a baseline against which people's scores can be compared. Reliability is concerned with how consistently the inventory measures what it is supposed to measure, whereas validity endeavors to determine how well the inventory is measuring what it claims to measure. This section provides data on the psychometric properties of the ECR.

Normative Data

The ECR was developed by collecting normative data from a relatively large group of 3,240 professional people from several countries including: Australia, New Zealand, Ireland, North America, and Europe. Participants consisted largely of individuals from a diverse range of professional occupations and included college students, the majority of whom were completing advanced business and management degrees. In addition, a number of people completed the ECR and five other well-validated inventories; the Revised NEO Personality Inventory (NEO PI-R: Costa & McCrae, 1992), the Beck Depression Inventory - Second Edition (BDI-II: Beck, Steer & Brown, 1996), the Brief Symptom Inventory (BSI: Derogatis, 1992), the Self-Liking Self-Competence Scale (SCLC: Tafrodi & Swann, 1995), and the BarOn Emotional Intelligence Inventory (EQ-i: Bar-On, 1997).

Standard Scores

In order to be able to compare scores on one scale with scores on another scale, it is necessary to standardize the scores relative to their distribution on each scale. One way of achieving this is to convert raw scores into standard scores. Standard scores have the same mean and standard deviation and enable more accurate comparisons to be made between a score on one scale and a score on another. Raw scores on the ECR are converted into standard scores by default using the general normative sample. Alternatively, standard scores can be created by combining either of two age specific normative groups – under 30 years, and 30 years and older with gender specific norms. To score the report using combined age and gender specific norms, the candidate is required to enter their age and gender before scoring their report.

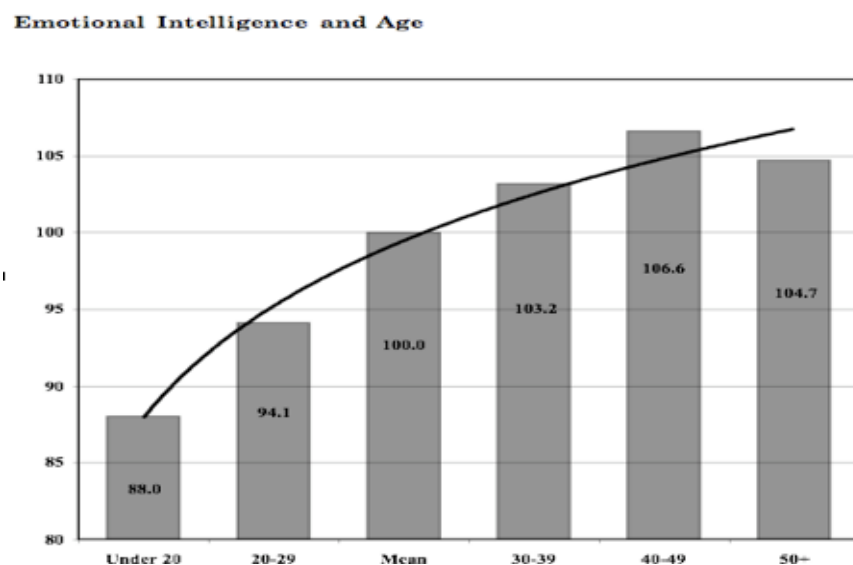
Raw scores on the ECR are automatically converted into standard scores using a mathematical formula based on the relative distribution of scores on each scale. Given that the ECR has a development focus—that is, it focuses on how an individual can improve the quality of their leadership behavior—scores on the ECR reports are

expressed in developmental terms. Accordingly, scores falling 80 or below are described as a “Development Need,” scores between 81–90 as “Development Opportunity,” scores between 91–109 as “Effective Range,” scores between 110–120 as “Strength to Build On,” and scores 121 or above as “Signature Strength.”

Age and Gender Effects Summary

The findings reveal that there are small differences between males and females on at least two of the ECR scales, however these differences are very small. There are, however, significant age related differences that have a moderate effect on four scales on the ECR, as well as the Total EC score (see Figure 1.1). Although these differences are moderate, these findings suggest that when using the ECR with individuals under 30, age differences should be taken into account when interpreting scores. This is particularly important when interpreting scores for individuals under 20. The ECR provides an option to choose combined age and gender specific normative data to generate scores for these groups.

Figure 1.1



Reliability

Reliability is the extent to which test scores are consistent and relatively free of random errors of measurement. Reliability is established when test scores for a group of respondents are consistent over repeated administrations of the assessment over time. There are several ways to measure reliability. The most common includes an analysis of each scale’s internal consistency.

Internal Consistency

Internal consistency is the degree to which the items of a particular scale measure the construct that the scale was designed to measure. Table 1.0 presents the internal consistency coefficients for the ECR scales based on 3,240 participants. The average Cronbach alpha coefficients are high for all of the scales, ranging from a “low” of .72 (Adaptability and Self-Actualization) to a high of .85 (Self-Confidence), with an average

internal consistency coefficient of .78. These results suggest very good reliability (see Table 1.0).

Table 1.0

**Internal Consistency Coefficients for the ECR Scales Raw Scores
Examined with Cronbach Alpha on 3,240 participants**

Scale	Number of Items	Cronbach Alpha Coefficient
Self-Knowing	7	.80
Self-Reliance	7	.73
Straightforwardness	7	.77
Optimism	7	.83
Self-Actualization	7	.72
Self-Confidence	7	.85
Relationship Skills	7	.76
Empathy	7	.77
Self-Control	7	.83
Adaptability	7	.72
Positive Impact	7	.74

Validity

Validity is an important psychometric indicator of the soundness of a measurement tool that evaluates the instrument's ability to measure what it is supposed to measure, and the extent to which it can predict related outcomes.

A Principal Component factor analysis was applied to 70 items of the 77-item ECR (the 7 Positive Impact scale items were omitted). A 5-factor solution of the Principal Component analysis (with a varimax rotation) afforded the greatest interpretability and satisfied the most stringent criteria used in the analysis. The 5-factor solution revealed a total of approximately 42% of the variance (see Table 1.1).

Table 1.1
Factors and Their ECR Scale Equivalents

Factor	% of Var.	Factor Resembling EQ Domain	ECR Scale Equivalents
1	25.6%	Self- Management	Self-Control, Self- Confidence & Self-Reliance
2	6.0%	Adaptability	Adaptability, Self- Actualization & Optimism
3	3.9%	Social Awareness	Empathy & Self-Knowing
4	3.5%	Social Skills	Relationship Skills & Empathy
5	3.3%	Self-Awareness	Self-Knowing & Straightforwardness

Taken together, these five factors closely resemble the four domains identified by the three major conceptual models of EQ referred to earlier i.e., Self-Awareness, Self-Management, Social Awareness, and Social Skills. It also includes a fifth domain that most closely resembles a factor similar to the one Bar-On identifies in his model as Adaptability. All three models share a common core of basic concepts that refer to the ability to recognize and regulate emotions in ourselves and in others.

Confirmatory Factor Analysis (CFA), using EQS 6.1 (Bentler, 2006), was employed to assess the validity and reliability of the measurement components of the ECR 10-factor theoretical model. Table 1.2 displays the total factor variance and measurement error for the ECR latent construct and its indicators.

Table 1.2

Extracted Variance and Measurement Error for Measurement Indicators and ECR Latent Construct

Measurement Indicators	Construct Loading	Extracted Variance	Measurement Error
Self-Knowing (SK)	.680	46.3%	53.7%
Self-Reliance (SR)	.760	57.7%	42.3%
Straightforwardness (ST)	.657	43.1%	56.9%
Optimism (OP)	.865	74.8%	25.2%
Self-Actualization (SA)	.796	63.4%	36.4%
Self-Confidence (SF)	.848	72.0%	28.0%
Relationship Skills (RS)	.583	33.9%	66.1%
Empathy (EM)	.457	20.8%	79.2%
Self-Control (SC)	.719	51.6%	48.4%
Adaptability (AP)	.721	52.0%	48.0%
Latent Construct			
EC	-----	51.56%	48.44%

The analysis shows that the theoretical groupings fit well with the model and provide empirically acceptable support for the factor structure of this model.

ECR and Leadership

The ECR was administered to a number of specialist groups of professional people who may be regarded as leaders in their fields. These groups were chosen to examine the criterion validity of the ECR and whether the ECR had the ability to adequately identify those individuals regarded as leaders by their peers. Three groups were chosen including a group belonging to Leadership Victoria – an elite group of business and community leaders in Australia; a group from the Financial Services Industry identified as ‘high potentials’; and a group of HR professionals from the pharmaceutical industry with specialist roles in recruitment and selection.

When scores from these three leadership groups are combined, all scores are significantly higher than the mean on all ECR scales (see Table 1.3).

Table 1.3

Mean Scores Ranked from Highest to Lowest of Leadership Victoria Sample on ECR Scales (N = 27)

ECR Scale	Mean
Self-Confidence	114
Self-Reliance	113
Relationship Skills	113
Optimism	113
Self-Knowing	112
Self-Actualization	109
Straightforwardness	107
Adaptability	107
Empathy	103
Self-Control	103
Total EC	113

Once again, this suggests that the ECR is capable of identifying those behaviors associated with leadership. The findings are certainly consistent with the theoretical and empirical basis upon which the ECR was constructed. Accordingly, the ECR validity data appears to confirm that the ECR is an ideal instrument to assess EQ as it supports effective leadership performance.

Conclusion

The Emotional Capital model describes a set of positive emotional and social skills and represents a completely new psychology of leadership. The research supporting the development of the ECR reveals the important role emotional and social skills play in creating our most important source of wealth – emotional capital. The Emotional Capital Report is a psychometric tool that signifies an innovation in the measurement of leadership behaviors. It is an exciting advance in our ability to measure the building blocks that are scientifically linked to the behaviors of successful leaders. Together, the ECR™ and ECR 360™ provide an efficient, valid assessment of the emotional intelligence factors that characterize effective leaders.

More detailed and comprehensive information on the development and psychometric properties of the ECR is available by consulting the *Emotional Capital Report - Technical Manual* available from RocheMartin.

Discover Your Emotional Capital – Take the Test

www.emotionalcapitalists.com



References

- Bar-On, R. (1997). *The Emotional Intelligence Inventory (EQ-i): Technical manual*. Toronto: Multi-Health Systems.
- Bar-On, R. (2000). Emotional and social intelligence: Insights from the Emotional Quotient Inventory. In R. Bar-On & J. D. A. Parker (eds), *The Handbook of Emotional Intelligence*. San Francisco: Jossey-Bass.
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Beck Depression Inventory manual* (2nd ed.). San Antonio, TX: Psychological corporation.
- Bentler, P. (2006). *EQS 6 Structural Equations Program Manual*. Encino, CA: Multivariate Software Inc.
- Bentler, P. (2006). EQS for Windows (Version 6.1) [Computer software]. Encino, CA: Multivariate Software.
- Costa, P. T., Jr., & McCrae, R. R. (1992). *Revised NEO Personality Inventory: Professional manual*. Odessa, FL: Psychological Assessment Resources.
- Derogatis, L. R. (1992). *BSI: Administration and scoring procedures manual-II*. Baltimore: Clinical Psychometric Research.
- Goleman, D. (1995). *Emotional Intelligence*. New York: Bantam Books.
- Goleman, D. (1998). *Working with Emotional Intelligence*. New York: Bantam books.
- Goleman, D. (1998b). What makes a leader? *Harvard Business Review*, November-December.
- Goleman, D. (2001). *Emotional intelligence: Perspectives on a Theory of Performance*. In press.
- Matthews, G., Zeidner, M., & Roberts, R. D. (2004). *Emotional Intelligence: Science & Myth*. Cambridge: MIT Press.
- Newman, M. (2007). *The Emotional Capital Report: Technical Manual*. Melbourne: RocheMartin Institute.
- Newman, M. (2007a). *Emotional Capitalists – The New Leaders: Essential Strategies for Building Your Emotional Intelligence and Leadership Success*. Melbourne: John Wiley & Sons.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9, 185-211.
- Tafrodi, R. W. & Swann, W. B. Jr. (1995). Self-liking and self competence as dimensions of global self-esteem: Initial validation of a measure. *Journal of Personality Assessment*, 65 322-342.