Creating An Environment Where High Performance Is Inevitable and Sustainable: The High Performance Environment Model

Graham Jones¹, Mark Gittins², and Lew Hardy³

¹Lane4 Management Group, 10 Wall St, Princeton, NJ 08540, USA, E-mail: graham.jones@lane4.co.uk ²Lane4 Management Group, St Marks House, Station Rd, Bourne End, Bucks, SL8 5QF E-mail: mark.gittins@lane4.co.uk ³School of Sport, Health & Exercise Sciences, University of Wales, Bangor,George Building, Holyhead Rd, Bangor, Gwynedd, LL57 2PX, E-mail: I.hardy@bangor.ac.uk

ABSTRACT

This article presents a model of the psychological and social factors within a performance environment which impact upon organisational performance. A review of the organisational and performance psychology literatures was conducted to identify variables associated with sustainable high performance at the individual, group and organisational levels. The resultant variables were conceptualised within the areas of 'leadership', 'performance enablers', 'people', and 'organisational climate' to form the core components of the High Performance Environment (HPE) Model. The model (a) provides researchers, practitioners, and leaders with a view of the key areas to focus on to create and sustain high performance in organisations, and (b) encourages them to consider performance environments holistically, rather than considering specific variables in isolation.

Key words: Attitudes, Competing Values Theory, High Performance Environment Model, Organisational Climate, Performance Enablers, Transformational Leadership

Reviewer: Jim McKenna (Leeds Metropolitan University, UK)

INTRODUCTION

Our combined experience of consulting in the performance arenas of sport, business and the military has led to the conclusion that our impact on helping individuals and teams develop is maximised when we are also able to affect the environment they operate in. The majority of interventions and research in performance psychology has focussed on the individual and the team with the result that the performance environment has often been overlooked or factored out. Business organisations, for example, often attribute their success to having great people, rather than the environment these people perform in. However, people do not perform in a vacuum, and our contention is that the performance environment the organisation creates is just as important as the people performing in it.

Currently, there is no validated model which links the performance environment to high performance. The aim of this article is to address high performance from a contextual viewpoint and to identify the key psychological and social factors which impact upon organisational performance. There are clear benefits of such a model to practitioners in any performance domain. Firstly, the model provides a list of important variables to consider in performance development work. Secondly, the model shows the relationship between these variables. This will encourage practitioners to consider performance environments as a whole, rather than considering specific variables in isolation.

THE HIGH PERFORMANCE ENVIRONMENT (HPE) MODEL

The constructs comprising the HPE Model were identified from a review of the organisational performance literature in which business, sport and military domains figured prominently. The model was specifically developed to be applicable across these performance domains, and as such, transferability between them was an important consideration at all times during the development of the model. The development of the model was a challenging task because of the inherent complexity and number of factors at play and involved a number of iterations. It was important that all of the constructs included had either been shown to be associated with organisational performance, or associated with other factors which have been.

The HPE Model shown in Figure 1 comprises *leadership*, *performance enablers*, and *people* factors, represented within three concentric circles, and organisational climate, represented by four boxes containing achievement, wellbeing, innovation, and internal processes.

In development of the model, high performance was defined as performance which is consistently higher than that of the majority of peer organisations in the same sector, and over a prolonged time period. This definition views high performance as (a) consistent and sustainable, and (b) relative to, and affected by, the performance of other organisations. The latter is important because organisations are often described as 'succeeding or failing on the merits of their actions alone, as if performance was absolute' rather than relative [1, p. 112]. Instead, there are determinants of performance which organisations are not able to control; there are no guaranteed blueprints or formulae for organisational success. The aim of the HPE Model is to detail the predictors of organisational performance, which organisations are able to control and influence.

Leadership sits at the core of the model and is hypothesised to interact with performance enablers to impact on the people variables. In turn, people's attitudes and behaviours are hypothesised to interact with the organisational climate to impact on organisational performance. In addition to this uni-directional relationship radiating outwards from the centre of the model, we hypothesise that there will also be reciprocal relationships; e.g., follower behaviours influence leader behaviours, as well as various moderating and mediating relationships; e.g., follower attitudes to mediate the relationships between leadership behaviours and follower behaviours.

For the practitioner, the number of potential relationships between variables means that the HPE model should be viewed as a system in which variables operate in feedback loops, rather than in one-way, cause-and-effect relationships. Practitioners should be aware, therefore, that they cannot address a specific variable within the model without also having a wider impact on other variables within the performance environment.

The variables within each of the HPE Model components were identified by means of a systematic review of a number of literatures, that can be loosely termed under 'performance psychology', for variables associated with high performance at the individual, group and organisational levels.

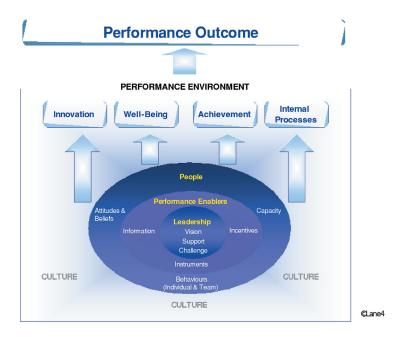


Figure 1. High Performance Environment Model

LEADERSHIP

Leadership has been defined as a process whereby an individual influences a group of individuals to achieve a common goal [2]. The leadership research literature has contrasted two types of leadership - transformational and transactional. Transactional

leadership involves gaining compliance through contingent reward and punishment, and management-by-exception. Transformational leadership involves offering followers a purpose that transcends short-term goals and focuses on higher order intrinsic needs, such that followers are motivated to go beyond their self-interest to achieve performance beyond expectations [3].

Within a high performance environment, the authors contend that the role of a leader is to create the conditions in which their followers will excel and fulfil their potential. As such, the goal of leaders in high-performance environments is to minimise the constraints and maximise the supports available. Transformational leadership meets these criteria, with a large body of research demonstrating its effectiveness. This literature suggests that followers of transformational leaders would be likely to report high levels of job satisfaction [4, 5], trust in their leader [6, 7], motivation and empowerment [8], and self-efficacy [9]. Furthermore, they would be likely to feel cohesive as a group [10], and to show high levels of performance individually [11, 12] in their teams [13], and business units [14].

Podsakoff et al. [15] conceptualised transformational leaders as identifying and articulating a vision of the future; being good role models; expecting high levels of performance; promoting co-operation and teamwork toward a common goal; showing respect for their followers and being concerned about their personal feelings and needs; and enhancing their interest in and awareness of problems such that they are able to think about them in new ways. In addition to these six transformational behaviours, Podsakoff et al. [15] included one transactional leadership behaviour contingent reward - referring to the extent to which leaders reward followers for attaining specified performance levels. These behaviours predicted employees' extra role behaviours; i.e., the extent to which employees went beyond their role requirements for the benefit of the organisation. The effects of these transformational leadership behaviours were mediated by the employee attitudes of job satisfaction, organisational commitment, and trust in and loyalty to the leader.

We hypothesise that Podsakoff et al.'s [15] seven leadership behaviours exert their influence on followers through the provision of three 'macro-behaviours'; specifically, vision, support, and challenge. This representation of transformational leadership as the provision of vision, support, and challenge was first developed as a consultancy model for use in a military setting to simplify transformational leadership theory for section commanders in the early stages of an intervention [16]. We further hypothesise that high levels of all three of vision, support, and challenge are required to create an environment where high performance is inevitable and sustainable. For example, a performance environment in which levels of challenge are high in comparison to levels of support is likely to be stressful and lead to performer burnout. In contrast, high levels of vision and support with low levels of challenge may well be an enjoyable and motivating place to work, but may be too cosy and comfortable for really high levels of performance to occur.

PERFORMANCE ENABLERS

In addition to providing performers with vision, support, and challenge, transformational leadership behaviours also exert their effects through interacting with a number of situational variables [17]. These variables have been investigated in

a number of separate streams of research, including job characteristics, substitutesfor-leadership, and the work-design literatures. We have amalgamated these work streams under the heading of 'performance enablers' [18], which we have defined as environmental supports required by people to operate effectively in any performance environment. We have categorised these under 'information', 'instruments', and 'incentives'.

It is widely agreed that individuals need a certain amount of *information* to perform their roles effectively. Performers benefit from clear goals which are specific, appropriately stretching and which they are actively involved in setting, or at least accept [19]. Performers also need information on their role responsibilities, including their scope of responsibilities, the behaviours required to fulfil these responsibilities, and the way in which their role is evaluated, in order to give them a sense of structure in their performance environment [20]. While goals and role clarity provide performers with direction and structure, individuals also benefit both from developmental feedback which helps them to learn, develop, and make improvements [21], and social support, which comprises a variety of resources, such as task-relevant information and praise, which assist them [22].

In addition to the provision of information, people also need to be equipped with the right *instruments* to help them perform their jobs effectively. Within the HPE Model, instruments have been grouped into the *physical* instruments of tools, technology and equipment, *knowledge-related* instruments such as training and development, and the *structural* instruments of communication networks, and the way teams are structured. Whilst some of these variables are not psychosocial, like others in the HPE Model, our contention is that they play an important role in any performance environment.

Finally, the provision of *incentives* ensures that people are motivated to perform to the best of their ability. Self-Determination Theory suggests that a wide variety of motivators can be grouped based on individuals' desire to satisfy their basic psychological needs of competence, autonomy, and relatedness [23]. According to this perspective, leaders need to create a motivational climate in which people feel competent at a given task or activity, have an appropriate level of autonomy to choose how they carry out that activity, and to feel a sense of connectedness to others. These needs can be met through the provision of a number of variables including: motivational feedback in the form of social recognition such as praise, attention and appreciation for good work provided contingently [24], opportunities to further one's career [25], participation in decision-making [26], a high-quality relationship with one's leader [27], and work which is viewed as meaningful in relation to one's own ideals or standards [28]. Monetary reward has been shown to attract, motivate and retain people as well as to positively impact individual [29] and business unit [30] performance. However, if contingent on performance, pay and bonuses can also induce controlled motivation which inhibits the satisfaction of competence, autonomy, and relatedness [31].

PEOPLE

The transformational leadership behaviours and performance enablers described above have been shown to be positively associated with a number of desirable attitudinal and behavioural outcome variables. In the *people* section of the HPE Model, we have grouped these variables under the headings of 'attitudes', 'behaviours', and 'capacity'.

With regard to attitudes first, trust in one's leader is one of the main reasons individuals are motivated by transformational leadership to perform beyond expectations [32]. Individuals with high levels of trust in their leader have been shown to perform to a high level and to report higher job satisfaction and organisational commitment [33]. In turn, organisational commitment has been shown to be associated with higher levels of effort at work [34] and increased feelings of comfort and personal competence [35]; whilst job satisfaction has been shown to be positively associated with levels of performance [36]. Also associated with higher levels of performance, is the values fit between individuals and the organisation [37].

In addition to *individual* attitudes, one of the most important characteristics of transformational leadership is that it predicts the collective efficacy of *groups* and *teams* [38]. Collective efficacy reflects the shared beliefs of group members in their group's capabilities [39]. In addition to reporting higher levels of job satisfaction and organisational commitment [40], groups high in collective efficacy are more likely to expend effort on tasks and to show persistence in the face of problems [41], and to perform to high levels in a variety of settings [42].

The attitudinal variables described above play an important role in mediating the relationship between transformational leadership and follower *behaviours*. Specifically, followers of transformational leaders have been shown to go beyond their role requirements for the benefit of the organisation; e.g., helping colleagues from other teams, and participating voluntarily in work groups and meetings across the organisation [43]. In a high performance environment, one would also expect people to demonstrate high levels of engagement with their roles, characterised by high levels of energy, dedication, and absorption in their day-to-day work [44]. Furthermore, one would expect teams to co-operate with each other on tasks, co-ordinate these tasks so that they run smoothly, and communicate effectively. All of these team behaviours have been associated with team effectiveness [45].

While attitudes and behaviour are crucial determinants of performance, organisations need people with sufficient ability or *capacity* to do their job. It is for this reason that organisations invest in the areas of talent assessment and talent management; to ensure that they attract, develop, and retain individuals with the right skills and abilities. Naturally, these skills and abilities include technical skills and knowledge specific to the role. Yet, in addition, there is also literature showing the importance of emotional intelligence- - the ability to perceive, understand, and regulate emotions [46] - and mental toughness [47] - the ability to consistently perform to high standards through times of personal and professional pressure [48].

ORGANISATIONAL CLIMATE

The areas of the HPE Model described above focus on individuals and teams within a performance environment. However, the perception that individuals have of their organisation as a whole - otherwise known as the 'organisational climate' - is also an important predictor of performance [49]. For example, Quinn and Rohrbaugh's Competing Values Theory suggests that organisational performance can be partly

explained by the extent to which organisations balance their focus on 4 values, which Quinn and Rohrbaugh originally termed as: 1) a rational goal approach; 2) a human relations approach; 3) an open systems approach; and 4) an internal process approach. To simplify, have re-labelled these values respectively as: 1) *Achievement* - an emphasis on productivity and goal achievement; 2) *Wellbeing* - an emphasis on the development of people within the organisation; 3) *Innovation* - an emphasis on creativity; and 4) *Internal Processes* - an emphasis on formalisation and internal control of systems and procedures [50]. A research study which followed 67 U.K. manufacturing organisations over a 10-year period found that these four climate factors accounted for a total of 29% of the variation in productivity and 10% in the variation in profitability of the organisations measured [51]. Interestingly, a focus on wellbeing was shown to be the most significant predictor of productivity and profitability.

Competing Values Theory suggests that the four values of achievement, wellbeing, innovation and internal processes compete with each other for focus, therefore providing tensions for organisations to manage. Consequently, one would expect an organisation with an excessive focus on achievement to also have low wellbeing due to burnout. By contrast, an organisation with an excessive focus on internal processes and procedures might report stifled innovation and creativity. Organisations from different industry sectors are also likely to prioritise different values. For example, a pharmaceutical company is likely to focus more on innovation, an investment bank may be very achievement orientated, while a focus on internal processes may be most prevalent in a public sector organisation. Overall, the four values provide a useful framework for the practitioner to explore an organisation's current balance of focus and compare this to their aspired balance of focus. This framework can also be used to set goals within each of the four values, forming a balanced scorecard and a framework for performance management.

DEVELOPING HIGH PERFORMANCE ENVIRONMENTS: APPLYING THE HPE MODEL

The HPE Model has now been applied by Lane4 in the development of teams and organisations, from sectors as diverse as management consulting, aviation, holiday and leisure, legal, IT services, investment banking, engineering and construction, and retail. To supplement the HPE model, a diagnostic has been developed - the HPE Scan - to measure the constructs within the model. The HPE model and scan have been used for a variety of purposes, including the assessment of perceptions of employees involved in mergers and acquisitions, as a framework to develop a people development strategy, to benchmark against competitors, to address underperformance, to understand intra-organisational performance discrepancies, and to demonstrate organisational health in order to secure financial investment.

An example of how the HPE Scan has been used to better understand intraorganisational discrepancies, was Lane4's work with a global car manufacturer. This organisation was concerned with the disparity in performance levels between their UK car dealerships. To develop greater consistency in performance between dealerships, the challenge was for Lane4 to identify the key factors that underpinned their high performing dealerships so that lower performing dealerships could gain greater clarity on how to become high performing. In this study, 143 dealerships completed the HPE scan, providing 1741 completed scans. Each dealership was then graded 'A', 'B' or 'C' in accordance with how well it scored on the HPE Scan. The data collected was then used to analyse the relationship between dealerships scores on the HPE Scan and their performance on seven Key Performance Indicators. Specifically, the aim was to identify the key predictors of performance for a car dealership.

The results showed that there was a significant relationship between the dealerships' performance environment and their KPI performance; i.e., the dealerships graded 'A' on the HPE Scan were ranked significantly higher on their KPI's than those graded as 'B' dealerships, while 'B' dealerships were ranked significantly higher on their KPI's than 'C' dealerships.

Overall, while the performance environments of Lane4's clients have shown a variety of profiles, a number of themes have emerged. Analysis of the HPE Scan data has shown that several key factors in the HPE Model differentiate high and low performing organisations. Firstly, all of the leadership behaviours included in the model discriminate between the high and low performing organisations except 'high performance expectations'. In explanation, it seems likely that leaders in all organisations insist on the best possible performance from their employees. However, in terms of performance enablers, a few factors have been shown to be key peformance differentiators. These are the extent to which organisations provide employees with autonomy, motivational feedback, advice when things are not going well, and well defined goals. In the 'people' section of the model, high and low performing organisations are differentiated by peoples' dedication to their work, trust in their leader, belief in the organisation's values, and collective efficacy. In summary, these findings provide organisations and organisation development practitioners with key areas of focus in order to maximise performance.

CONCLUSION

This article presents a model of a performance environment where high performance is inevitable and sustainable. For the practitioner, the model can be used to assess the current strengths and weaknesses of any performance environment, and identify strategies for improvement. From a theoretical perspective, the development of this model addresses the criticism that organisational psychology studies have tended to examine either: (a) only how specific aspects of the performance environment influence performance, or (b) a multitude of variables without theoretically linking them together.

Furthermore, the model provides a means of objectively assessing predictors of organisational performance. Indeed data collected using the HPE Scan from a number of business organisations has demonstrated impressive predictive validity of the model to date. Further work continues to be undertaken to test the structural validity of the model using confirmatory factor analysis.

The HPE Model provides a valuable tool for diagnosing areas of strength and development requirements within organisations. Its holistic perspective enables leaders to piece them together in a way that drives a coordinated approach to developing their whole organisation.

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Lane4 is a professional services firm working in the fields of organisational change, leadership development, and executive coaching. With a unique heritage drawn from elite sporting and commercial achievement, Lane4 consultants help businesses to excel through the engagement and development of their people. Lane4 has offices in Europe, the US, and Asia Pacific, and works with business and HR leaders to improve organisational performance.

REFERENCES

- Rosenweig, P.M., The Halo Effect...and the Eight Other Business Delusions that Deceive Managers, Free Press, New York, 2007.
- Northouse, P.G., Leadership: Theory and Practice, 3rd edn., Sage Publications Inc, Thousand Oaks, CA, 2004.
- 3. Bass, B., Leadership and Performance Beyond Expectations, The Free Press, New York, 1985.
- Berson, Y. and Linton, J.D., An Examination of the Relationships Between Leadership Style, Quality, and Employee Satisfaction in R&D Versus Administrative Environments, R&D Management, 2005, 35(1), 55-60.
- 5. Bono, J.E. and Judge, T.A., Core Self-Evaluations: A Review of the Trait and its Role in Job Satisfaction and Job Performance, *European Journal of Personality*, 2003, 17, 5-18.
- Bass, B. M., Transformational Leadership: Industry, Military, and Educational Impact, Erlbaum, Mahwah, NJ, 1998.
- Nemanich, L.A. and Keller, R.T., Transformational Leadership in an Acquisition: A Field Study of Employees, *The Leadership Quarterly*, 2007, 18, 49-68.
- 8. Dvir, T., Eden, D., Avolio, B. J. and Shamir, B., Impact of Transformational Leadership on Follower Development and Performance: A Field Experiment, *Academy of Management Journal*, 2002, 45(4), 735-744.
- Rafferty, A. E. and Griffin, M. A., Dimensions of Transformational Leadership: Conceptual and Empirical Extensions, *The Leadership Quarterly*, 2004, 15, 329-354.
- Bass, B.M., Avolio, B.J., Jung, D.I. and Berson, Y., Predicting Unit Performance by Assessing Transformational and Transactional Leadership, *Journal of Applied Psychology*, 2003, 88(2), 207-218.
- Barling, J., Weber, T. and Kelloway, E.K., Effects of Transformational Leadership Training on Attitudinal and Financial Outcomes: A Field Experiment, *Journal of Applied Psychology*, 1996, 81(6), 827-832.
- 12. Whittington, J.L., Goodwin, V.L. and Murray, B., Transformational Leadership, Goal Difficulty, and Job Design: Independent and Interactive Effects on Employee Outcomes, *The Leadership Quarterly*, 2004, 15(5), 593-606.
- Keller, R.T., Transformational Leadership, Initiating Structure, and Substitutes for Leadership: A Longitudinal Study of Research and Development Project Team Performance, *Journal of Applied Psychology*, 2006, 91(1), 202-10.
- Howell, J. M. and Avolio, B. J., Transformational Leadership, Transactional Leadership, Locus of Control, and Support for Innovation: Key Predictors of Consolidated Business-Unit Performance, *Journal of Applied Psychology*, 1993, 78, 891-902.

- 15. Podsakoff, P. M., MacKenzie, R., H., Moorman, R. H. and Fetter, R., Transformational Leader Behaviours and their Effects on Followers' Trust in Leader, Satisfaction, and Organisational Citizenship Behaviours, *The Leadership Quarterly*, 1990, 1(2) 107-142.
- Hardy, L., Arthur, C.A., Jones, G., Shariff, A., Munnoch, K., Isaacs, I. and Allsop, A.J., A Correlational and an Experimental Study Examining the Sub-Components of Transformational Leadership, *The Leadership Quarterly*, In Press.
- 17. Podsakoff, P. M., MacKenzie, S. B. and Bommer, W. H., Transformational Leadership Behaviours and their Effects on Followers' Trust in Leader, Satisfaction, and Organisational Citizenship Behaviours, *Journal of Management*, 1996, 22(2), 259-298.
- Gilbert, T.F., Human Competence: Engineering Worthy Performance, McGraw-Hill, New York, 1978.
- Locke, E. A. and Latham, G. P., A Theory of Goal Setting and Task Performance, Prentice-Hall, Englewood Cliffs, NJ, 1990.
- Beauchamp, M. R., Bray, S. R., Eys, M.A., and Carron, A.V., Role Ambiguity, Role Efficacy, and Role Performance: Multidimensional and Mediational Relationships within Interdependent Sport Teams, *Group Dynamics: Theory, Research, and Practice*, 2002, 6, 229-242.
- Zhou, J., When the Presence of Creative Coworkers is Related to Creativity: Role of Supervisor Close Monitoring, Developmental Feedback, and Creative Personality. *Journal of Applied Psychology*, 2003, 88(3), 413–422.
- Cutrona, C.E. and Russell, D.W., Type of Social Support and Specific Stress: Toward a Theory of Optimal Matching, in: Sarason, B.R., Sarason, I.G. and Pierce, G.R., eds., Social Support: An Interactional View, Wiley, New York, 1990, 319-366.
- Deci, E.L. and Ryan, R.M., Intrinsic Motivation and Self-Determination in Human Behaviour, Plenum, New York, 1985.
- Stajkovic, A. D. and Luthans, F., Behavioral Management and Task Performance in Organizations: Conceptual Background, Meta-Analysis, and Test of Alternative Models, *Personnel Psychology*, 2002. 56, 155–194.
- 25. London, M., Relationships Between Career Motivation, Empowerment and Support for Career Development, *Journal of Occupational and Organizational Psychology*, 1993, 66(1), 55-69.
- 26. Bakan, I., Suseno, Y., Pinnington, A. and Money, A., The Influence of Financial Participation and Participation in Decision-Making on Employee Job Attitudes, *International Journal of Human Resource Management*, 2004, 15(3), 587-616.
- Greguras, G.J. and Ford, J.M., An Examination of the Multidimensionality of Supervisor and Subordinate Perceptions of Leader-Member Exchange, *Journal of Occupational and Organisational Psychology*, 2006, 79, 433-465.
- May, D.R., Gilson, R.L. and Harter, L.M., The Psychological Conditions of Meaningfulness, Safety and Availability and the Engagement of the Human Spirit at Work, *Journal of Occupational and Organizational Psychology*, 2004, 77, 11-37.
- Stajkovic, A. D. and Luthans, F., A Meta-Analysis of the Effects of Organizational Behavior Modification on Task Performance, 1975–1995, Academy of Management Journal, 1997, 40, 1122–1149.
- Peterson, S.J. and Luthans, F., The Impact of Financial and Non-Financial Incentives on Business-Unit Outcomes Over Time, *Journal of Applied Psychology*, 2006, 91(1), 156-65.
- Deci, E.L., Koestner, R. and Ryan, R.M., A Meta-Analytic Review of Experiments Examining the Effects of Extrinsic Rewards on Intrinsic Motivation, *Psychological Bulletin*, 1999, 125, 627-668.
- 32. Yukl, G., An Evaluation of Conceptual Weakness in Transformational and Charismatic Leadership Theories, *The Leadership Quarterly*, 1999, 10, 285–305.
- Dirks, K.T. and Ferrin, D.L., Trust in Leadership: Meta-Analytic Findings and Implications for Research and Practice, *Journal of Applied Psychology*, 2002, 87, 611-628.

- Stroh, L. K. and Reilly, A. H., Loyalty in the Age of Downsizing, Human Resource Management and Industrial Relations, 1997, 38(4), 83-88.
- Allen, N. J. and Meyer, J. P., The Measurement and Antecedents of Affective, Continuance and Normative Commitment to the Organization, *Journal of Occupational Psychology*, 1990, 63, 1-18.
- Judge, T. A., Thoresen, C. J., Bono, J. E. and Patton, G. K., The Job Satisfaction-Job Performance Relationship: A Qualitative and Quantitative Review, *Psychological Bulletin*, 2001, 127(3), 376-407.
- Kristof, A., Person-Organization Fit: An Integrative Review of its Conceptualizations, Measurement, and Implications, *Personnel Psychology*, 1996, 49(2), 1-49.
- 38. Shamir, B., Calculations, Values, and Identities: The Sources of Collectivistic Work Motivation, *Human Relations*, 1990, 43(4), 313-332.
- Gibson, C. B., The Efficacy Advantage: Factors Related to the Formation of Group Efficacy, *Journal of Applied Social Psychology*, 2003, 33, 2153-2186.
- 40. Jex, S. M. and Bliese, P. D., Efficacy Beliefs as a Moderator of the Impact of Work-Related Stressors: A Multilevel Study, *Journal of Applied Psychology*, 1999, 84, 349–361.
- 41. Bandura, A., Exercise of Human Agency Through Collective Efficacy, *Current Directions in Psychological Science*, 2000, 9, 75-78.
- 42. Stewart, G. L. and Barrick, M. R., Team Structure and Performance: Assessing the Mediating Role of Intrateam Process and the Moderating Role of Task Type, *Academy of Management Journal*, 2000, 43, 135-148.
- 43. Podsakoff, P., Ahearne, M. and MacKenzie, S., Organizational Citizenship Behavior and the Quantity and Quality of Work Group Performance, *Journal of Applied Psychology*, 1997, 82(2), 262-270.
- Schaufeli, W. B., Salanova, M., Gonzales-Roma, V. and Bakker, A. B., The Measurement of Engagement and Burnout: A Two Sample Confirmatory Factor Analytic Approach, *Journal of Happiness Studies*, 2002, 3, 71–92.
- 45. Campion, M.A., Papper, E.M. and Medsker, G., Relations Between Work Team Characteristics and Effectiveness: A Replication and Extension, *Personnel Psychology*, 1996, 49(2), 429-52.
- 46. Mayer, J. D., Salovey, P. and Caruso, D. R., Emotional Intelligence: Theory, Findings, and Implications, *Psychological Inquiry*, 2004, 15(3) 197-215.
- 47. Jones, J.G. and Moorhouse, A., *Developing Mental Toughness: Gold Medal Strategies for Transforming Your Business Performance*, 2nd edn., Spring Hill, Oxford, 2008.
- 48. Jones, J. G., Hanton, S. and Connaughton, D., What is This Thing Called Mental Toughness? An Investigation of Elite Performers, *Journal of Applied Sport Psychology*, 2002, 14, 205-218.
- Denison, D. R., Corporate Culture and Organisational Effectiveness, John Wiley and Sons, New York, NY, 1990.
- Quinn, R. E. and Rohrbaugh, J., A Competing Values Approach to Organisational Effectiveness, *Public Productivity Review*, 1981, 5, 122-140.
- 51. Patterson, M. G., West, M.A., Lawthom, R. and Nickell, S., *Impact of People Management Practices on Business Performance*, Institute of Personnel and Development, London, 1997.