

Are happy managers more productive?

2005-2

Peter Hosie and Peter Sevastos

*Curtin University of Technology*  
*School of Management*  
*Working Paper Series*

**2005-2**

**Are happy managers more productive?**

**Peter Hosie**  
**and**  
**Peter Sevastos**

## **ABSTRACT**

Decades of research have failed to establish a strong link between managers' job satisfaction and performance. Despite support in the literature to suggest that a relationship exists between job satisfaction and managers' performance the empirical evidence to support this proposition is mixed. A seminal question in psychology and management is revisited – the 'happy managers productive worker' thesis, by investigating the impact of job-related affective well-being and intrinsic job satisfaction on Australian managers performance. Survey items were derived from the literature and administered to managers from Western Australian organizations using self-report on established affective well-being and intrinsic job satisfaction scales. An empirical methodology was used to test the hypotheses. Managers' contextual and task performance scales were developed through from the literature and confirmatory factor analysis. A measurement model of managers' performance using supervisory ratings was tested and confirmed to be multivariate and consist of eight-dimensional construct of performance. Canonical correlation and hierarchical multiple regression were used to analyze the linear combination of managers' affective well-being and job satisfaction with their performance. Indicators of affective well-being and intrinsic job satisfaction were found to predict dimensions of managers contextual and task performance.

## **KEYWORDS**

Managers, Happy-Productive Worker, Job-Related Effective Well-Being, Intrinsic Job Satisfaction, Job Performance

## **INTRODUCTION**

There has long been an adherence to the intuitively appealing notion that happy employees perform better. But decades of research have been unable to establish a strong link between intrinsic job satisfaction and performance. Belief in the 'happy-productive worker' thesis has its roots in the Human Behaviour School of the 1950s. Similarly, the 1970s Human Relations Movement had a significant influence on job redesign and quality-of-life initiatives and was credited with specifying the original satisfaction-performance relationship (Strauss 1968). Despite mixed empirical evidence, there is support in the literature to suggest that a relationship exists between managers' affective wellbeing, intrinsic job satisfaction and their performance.

This study investigated relationship between managers' job-related affective well-being ('affective well-being'), intrinsic job satisfaction and their contextual and task job performance ('managers' performance'). Specifically, the main goal was to establish which indicators of managers' affective well-being and intrinsic job satisfaction predict dimensions of their performance. Certain indicators of affective well-being and intrinsic job satisfaction were found to predict dimensions of managers' contextual and task performance. An ancillary objective was to establish the structure of managers' performance. Answering this research question required the development of a new instrument for measuring managers' performance, and also the differentiation of the affective well-being from intrinsic job satisfaction constructs. Data is presented to specify which aspects of managers' affective well-being and intrinsic job satisfaction predict dimensions of their contextual and task performance. For a detailed account of the development of the managers' performance measurement model refer to Hosie, Sevastos and Cooper (2006).

## **JUSTIFICATION FOR THE RESEARCH**

A strong causal link has been established between people management and business performance by Patterson, West, Lawthom and Nickell (1998). Compared to other management practices (e.g., strategy, quality focus, investment in research and development), human resource practices explained 18% of the variation in productivity and 19% in profitability of companies in the United Kingdom. Two clusters of skills, acquisition and development of employee skills (including the use of appraisals), and job design were shown to be particularly important. Patterson and colleagues have established an empirically compelling argument supporting the relationship between people management practices and commercial performance.

Managers are pivotal to an organization's productivity and effectiveness, since they have ultimate responsibility for maximising the resources available for organizations to create value (Jones, 1995). The resource-based view of the firm recognised the value added by human capital (Hamel & Prahalad, 1994; Wernefelt, 1984). Regardless of the industry or country concerned, managers represent the human capital that is critical to an organization's success (Williams, 1991). Any decline in managers'

performance inevitably results in revenue foregone, opportunities lost, and increased costs. In turn, this hampers the capacity of organizations and, ultimately, national economies to create wealth.

Organizations are under increasing pressure to improve productivity, while simultaneously reducing costs, resulting in an epidemic of 'corporate anorexia' (Hamel, 1996). A new enterprise formula is emerging - '1/2 x 2 x 3' - whereby half as many people are being paid twice as much, to produce three times more (Handy, 1996). This trend to 'squeezing the pips' is particularly evident for managers, where the incidence of stress and burnout is increasingly common (Reinhold, 1997; Quinn, Faerman, Thompson & McGrath, 1996).

Affective well-being is treated as a first order concept that underpins stress, a second order concept. Thus, affective reactions are conceived of as a precursor to 'stress' in the workplace. Emotional reactions, resulting from intrinsic and extrinsic stimuli, determine a person's reactions to stressful situations. The US National Institute of Occupational Safety (1991) has defined stress generically as

... harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker. Job stress can lead to poor mental health and even injury. (p. 6)

Empirical findings from longitudinal studies support the view that the work environment exerts an influence on mental and physical health, including both short-term outcomes and long-term health impairment, particularly cardio-vascular disease (Karasek, 1989, 1979; Wall, Kemp, Jackson & Clegg, 1986).

Organisational dynamics experienced by Australian managers are indicative of those facing most nation-states and economies. Australian managers are under increasing pressure to produce superior results in shorter time-frames, with fewer resources (Forster & Still, 2001; Coles, 1999). Handy (1996) considered the '1/2 x 2 x 3' formula 'about right' for Australia, New Zealand, the United Kingdom and North America. To reach and sustain heightened levels of performance, and to avoid burnout in this environment, it is desirable that organizations develop strategies for maintaining managers' affective well-being and intrinsic job satisfaction. Of the three psychological aspects of burnout (emotional exhaustion, depersonalisation, diminished sense of personal accomplishment), emotional exhaustion is increasingly prevalent in Western workplaces (Lee & Ashforth, 1996).

By establishing how affective well-being and intrinsic job satisfaction influences performance, it will be possible to predict how deterioration, or an improvement, in affective well-being and intrinsic job satisfaction impacts on managers' performance. Similarly, management practices that increase managers' affective well-being and intrinsic job satisfaction may result in corresponding reductions in workplace tension and improved efficiency. Such information may be used to develop recommendations about changes that are likely to promote a healthier and more supportive work environment for managers.

## **HAPPY-PRODUCTIVE EMPLOYEES**

Decades of research have found inadequate evidence to support the 'happy-productive worker thesis' (Staw, 1986) or the proposition that 'a happy worker is a good worker' (Katzell & Thompson, 1995: 111). Research has also been unable to establish a close link between job satisfaction and performance (c.f. Iaffaldano & Munchinsky, 1985; Locke, 1976; Vroom, 1964; Brayfield & Crockett, 1955). This may be a result of researchers erroneously conceiving and operationalising job satisfaction as synonymous with affective well-being (Cropanzano & Wright, 2001; Wright & Cropanzano; Cropanzano, James & Konovsky, 1993). Later meta-analyses have indicated that there is a stronger relationship between job satisfaction and job performance than was previously evident (Judge, Thoreson, Bono & Patton, 2001; Harter, Schmitt & Hays, 2001).

Researchers have mostly ceased investigating whether satisfied employees are more productive, possibly as a consequence of using job satisfaction as the predictor variable, instead of more appropriate measures, such as 'happiness' (Wright & Staw, 1999a, 1999b), or affective well-being (Sevastos, 1996). Also, the construct 'managers' job performance' has not been robustly measured, making associations between these constructs problematic. These results seem partly due to conceptual misspecification and inadequate research methodologies. Rather than being an aberrant stream of investigation, these findings are argued to result from poorly specified and measured constructs. Despite the lack of empirical evidence, the notion that satisfied or happy workers are more productive is firmly entrenched in

management ideology (Ledford, 1999; Wright & Staw, 1999a,b). Studies from the 1930s onwards found only modest support for the link between worker satisfaction and improved job performance (Organ & Paine, 1999).

Apart from a study by George and Bettenhausen (1990), affective well-being has seldom been investigated as a predictor of favourable work outcomes for managers. Wright and Staw (1999a,b) rekindled the general debate about whether happy workers are more productive. Wright and Staw also found a 'plausible link' between employees' affective states and work behaviour that justified "re-opening the question of whether happy workers are also more productive" (1991: 2). Reasoning and research into the construct of happiness preceded research into affective well-being. Emotions and happiness are first order conceptual bases of affective well-being. There is a case for extending the happy-productive worker thesis into an examination of the extent to which managers' affective well-being influences performance, using a more robust methodology to measure these constructs. Re-invigorating this debate may also inform the more general, but unproven proposition that happy employees perform more effectively.

## **MANAGERIAL AND PRACTITIONER IMPLICATIONS**

This study investigated affective well-being, an important aspect of emotions and was intended to contribute to the broader debate over what underpins human performance at work. A more sophisticated understanding of how affective well-being and intrinsic job satisfaction interacts with managers' performance, contributes to a better comprehension of aspects of the relationships underlying these constructs. Evidence of how affective well-being and intrinsic job satisfaction interacts with managers' performance will be valuable in determining job designs and organisational level interventions. Such an understanding has the potential to translate into improved managerial practices. These findings are also intended to progress the debate about how work might be structured to improve employees' performance.

Factors that indicate how managers sustain heightened levels of performance are identified in the model. In turn, this helps to explain the process of upward and downward spirals of managerial effectiveness, whereby positive or negative affective well-being and intrinsic job satisfaction leads to increased or reduced performance, which in turn either enhances positive, or exacerbates negative affective well-being and intrinsic job satisfaction. These issues need to be addressed if organizations are to operate effectively, in an integrative manner. Uncoordinated and inappropriate initiatives may result in costly and ineffectual outcomes for organizations.

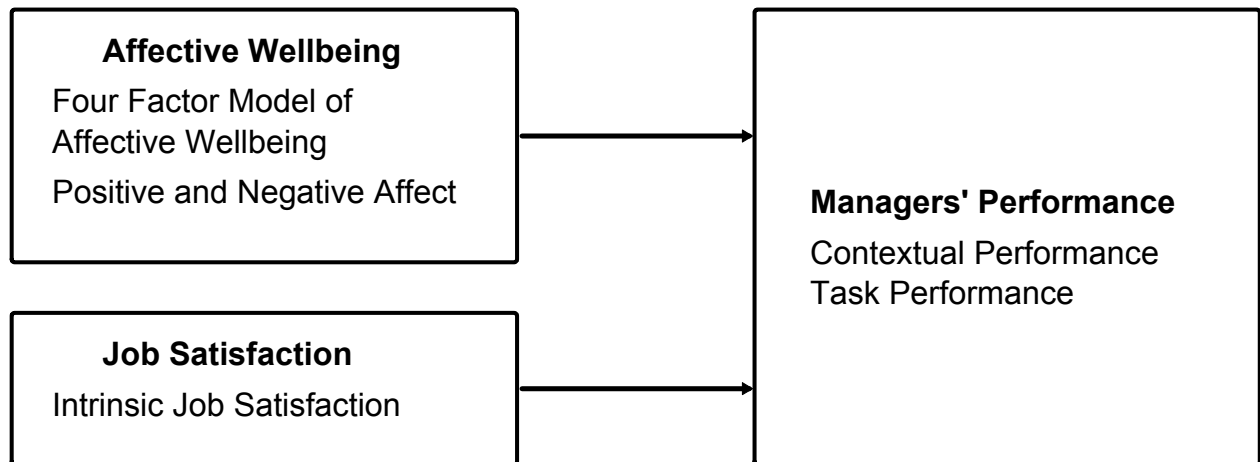
Successful initiatives to improve managers' affective well-being and intrinsic job satisfaction depend on individual and situational contingencies. Contingency theory indicates that one general intervention is unlikely to be effective for all managers in all situations, combinations of approaches are likely to result in longer term benefits. Mitchell reports that "people who are high in achievement needs or growth needs respond more favourably (are more satisfied, perform better) when faced with enhanced, challenging jobs than do people low in these needs." (1979: 246). In isolation, job enrichment may only enhance motivation for those managers who desire autonomy and challenge at work and in an organization where executives support participative decision making.

Assessments of affective well-being and intrinsic job satisfaction need to match closely the work environment that a manager is located in, a general consideration frequently overlooked, according to Warr (1987). Managers who spend long periods in jobs that lack opportunities for control and skill use are likely to have a negative affect on job-related competence. However, in some cases job-related anxiety, when linked to aspirations, is not necessarily linked to diminished affective well-being and intrinsic job satisfaction. For example, highly motivated managers who desire challenges may react to risks in a way that raises their anxiety level, but doesn't negatively impact their affective well-being and intrinsic job satisfaction.

## **A PARTIAL MODEL OF MANAGERS' AFFECTIVE WELL-BEING, INTRINSIC JOB SATISFACTION AND PERFORMANCE**

Warr has suggested that researchers should explore "what is known about the relationship between rated work performance and the components of mental health" (1987: 293). Notwithstanding extensive research efforts, job satisfaction (20%) and affective well-being (5%) have only been found to contribute 25% to our understanding of affective well-being (Sevastos, 1996). Research has mainly focused on job satisfaction when, as has been suggested, affective well-being and intrinsic job satisfaction may provide an improved explanation of performance in the workplace. From the information collected for this study, a model was developed and tested that may have predictive power, as illustrated in Figure 1:

**Figure 1:  
A Partial Model of Managers' Affective Well-being,  
Intrinsic Job Satisfaction and Performance**



## METHODOLOGY

A cross-sectional questionnaire of 19 Western Australian organizations was undertaken during 1998/99 to collect data to answer the research question, test the hypotheses and model. Data was collected using self-report measures of affective well-being and intrinsic job satisfaction, and downward appraisal of managers' performance using the evaluations of the person to whom managers then reported. A composite selection of private, public and 'third sector' organizations<sup>1</sup> was surveyed, representing managers from a range of occupational groups. A total of 400 useable questionnaires were returned from the 1,552 distributed, representing a 26% useable response rate.

Self-report data from the sample was used to measure managers' affective well-being and intrinsic job satisfaction. Published scales of Job-related affective well-being (Sevastos, 1996a) and intrinsic job satisfaction Sevastos, 1996; Cook *et al* 1980) items were used. The properties of the instruments used were acceptable for measuring state and trait affective well-being and managers' performance. Self and superior appraisals were used to gauge managers' performance. No suitable validated measures of managers' performance identified were identified in the literature. Managers' contextual and task performance items were devised by the researcher from Borman and Brush's (1993) and Borman and Motowidlo's (1997) taxonomies of managers' performance. Generic behaviour dimensions were included from the literature (Konovsky & Organ, 1996; Quinn, 1996; Borman & Brush, 1995; Organ & Lingl, 1995; Podsakoff *et al.*, 1990).

## METHODS

Measures used in this study are consistent with the established theory base in this stream of research, and were closely aligned to the constructs being investigated. From the literature review it became apparent that there were a considerable number of well-validated instruments for measuring affective well-being and intrinsic job satisfaction, but few that were suitable for collecting data on variables identified as determining behavioural outcomes of managers' performance. Affective well-being items were drawn from published and validated scales. This study extends upon Wright and Staw's (1999) research by more reliably measuring state affect (mood) and managers' performance. Ledford also determined that the "most important problem to address in research on the happiness-productivity connection is the operationalization of the two key constructs" (1999: 30). Wright and Staw conceded that their "data might have been stronger had there been better calibration in the measurement of mood and rated performance" (1999: 11).

Managers' performance items, developed for the measurement instrument used, were closely tied to the literature. Separate scales were designed and piloted to measure contextual and task performance

<sup>1</sup> Third Sector (3rd) refers to private incorporated organisations receiving private, Commonwealth and/or State Government funding.

dimensions. Relevant measures identified from the literature were identified for testing by the hypotheses derived for the model. Answering the research questions required the development of an instrument to measure the structure of managers' contextual and task performance. An eight-dimensional measurement model of managers' performance, derived from the survey data, was tested by exploratory and confirmatory factor analysis (CFA) to differentiate the structure of managers' contextual and task performance. The performance construct was operationalized in terms of four contextual dimensions (Endorsing, Helping, Persisting, Following) and four task dimensions (Monitoring, Technical, Influencing, Delegating). These dimensions were confirmed through multisample analysis and cross-validation techniques of managers' and superiors' ratings (N=200 and n=125, respectively).

## METHODS

### *Concepts, Constructs Dimensions and Measures*

Measures used in this study are consistent with the established theory base in this stream of research, and are closely aligned to the constructs being investigated. During the literature review it became apparent that there were a considerable number of well-validated instruments for measuring affective well-being and intrinsic job satisfaction, but few that were suitable for collecting data on variables identified as determining behavioural outcomes of managers' performance. Linkages between the relevant concepts, constructs, dimensions and measures used in this study have been established in previous studies and are given in Table 1 to support the choice of measures.

**Table 1:  
Concepts, constructs, dimensions, and measures**

CONCEPTS	CONSTRUCTS	DIMENSIONS	MEASURES
Dispositional job-related affective wellbeing.	Positive Affect. Negative Affect.	Interested, Distressed, Excited, Upset, Strong, Guilty, Scared, Hostile, Enthusiastic, Proud, Irritable, Alert, Ashamed, Inspired, Nervous, Determined, Attentive, Jittery, Active, Afraid.	20-item Positive and <i>Negative Affect</i> Scale (PANAS) (Watson & Clark, 1984).
Job-related affective wellbeing.	Enthusiasm, Depression, Anxiety, Relaxation.	Gloomy, Calm, Anxious, Enthusiastic, Motivated, Worried, Restful, Tense, Depressed, Optimistic, Relaxed, Miserable.	12-item Four Factor Model of Affective Wellbeing (Sevastos, 1996).
Job Satisfaction.	Intrinsic Job Satisfaction.	Intrinsic Job Satisfaction—utilisation of skills, amount of job complexity and opportunities for control, amount of responsibility and challenges.	7-item subscale (Cook et al., 1980a).
Contextual Performance.	Managers' Contextual Performance.	Persisting, Volunteering, Helping, Following, Endorsing.	Author-devised 22-item scale of managers' contextual performance developed from Borman & Motowidlo's (1997) 5-dimension taxonomy. Items from Konovsky & Organ (1996), Organ & Lingl (1995), Brush (1993), Podsakoff et al. (1990).
Task Performance.	Managers' Task Performance.	Planning, Guiding, Training, Communicating, Representing, Technical, Administrating, Maintaining, Coordinating, Deciding, Staffing, Persisting, Stressing, Committing, Monitoring, Delegating, Influencing, Interpreting, Organisational Effectiveness.	Author-devised 75-item scale of managers' task performance developed from Borman & Brush (1993) 18-dimension taxonomy. Subscale items developed to measure 'Judgement' and 'Organisational Effectiveness' (Quinn, 1996).

## STATISTICAL ATTRIBUTES OF AFFECTIVE WELL-BEING AND INTRINSIC JOB SATISFACTION SCALES

Two affective well-being and intrinsic job satisfaction scales were compared and evaluated before selecting those suitable for multivariate analysis. Both of these scales were suitable for measuring managers' affective-well-being in relation to their contextual and task performance. In particular, the scales were more theoretically congruent with the notion of 'happiness' (Sevastos 1996; Warr, 1990). The following scales were used to measure and analyse managers' affective well-being and intrinsic job satisfaction:

- 20-item Positive And Negative Affect Schedule (PANAS) (Watson & Clark, 1984).
- 12-item Four Factor Congeneric Model of Job-related Affective Well-being (Sevastos, 1996); and
- 7-item intrinsic job satisfaction subscale (Sevastos, 1996; Cook et al. 1980).

The IV (independent variable) scales (affective well-being and intrinsic job satisfaction) used were robust as they have been developed and replicated with large samples and are widely published. The affective well-being scales were not altered because the properties of these scales had already been established. Nevertheless, the psychometric properties of the scales were still pertinent. As with the pilot data, the scale properties are reported to ensure that the measures are within statistically acceptable parameters. Table 2 provides a summary of the alpha coefficients for affective well-being and intrinsic job satisfaction data:

**Table 2:**  
**Alpha coefficients and items for well-being scales and subscales (n = 200)**

Construct	Scales/subscales	Items	Variable Code	$\alpha$
Trait Affectivity	Positive Affect	10	1,3,5,9,10,12,14,16,17,19	.89
	Negative Affect	10	2,4,6,7,8,11,13,15,18,20	.87
Job-related	Enthusiasm	3	25,25,30	.90
Affective Wellbeing	Depression	3	21,29,32	.83
	Anxiety	3	23,26,28	.80
	Relaxation	3	22,27,31	.84
Job Satisfaction	Intrinsic Job Satisfaction	7	33-39	.85

All alpha coefficients for affective well-being and intrinsic job satisfaction were well above the recommended threshold of .70 (Nunnally, 1978), ranging from .80 - .90.

## SCALE MEANS, STANDARD DEVIATIONS AND CORRELATIONS

### PANAS

PANAS was used as a dispositional (personality) control of affect. Consistent with Watson and Tellegen's (1988) intention, all the PANAS variables had strong primary loadings on the appropriate factor with acceptable loadings on secondary factors, indicating relatively pure markers of PA and NA. PANAS has two factors that contained positive and negatively worded items. Schmitt and Stutts (1995) warned that factor analysis on scales with polar opposites (e.g., happy-sad) that are intended to represent a trait or descriptor, may result in spurious negative factors being identified. Variable loadings have been found to be lower when positively worded variables are loaded on the same factor (Raghunathan, 1995). Alphas for the scale in Table 3 indicated that the NA factor was authentic. Table 3 gives the item loadings for the pattern matrix loadings for PANAS.



**Table 3:  
PANAS (n = 200)**

**Pattern Matrix<sup>a</sup>**

	Factor	
	1 PA	2 NA
1) Interested.	.78	
3) Excited.	.59	
5) Strong.	.61	
9) Enthusiastic.	.81	
10) Proud.	.63	
12) Alert.	.62	
14) Inspired.	.77	
16) Determined.	.76	
17) Attentive.	.67	
19) Active.	.54	
2) Distressed.		.54
4) Upset.		.57
6) Guilty.		.46
7) Scared.		.82
8) Hostile.		.42
11) Irritable.		.44
13) Ashamed.		.52
15) Nervous.		.71
18) Jittery.		.72
20) Afraid.		.91

a. Rotation converged in 7 iterations.

Total variance explained for PANAS was 50.611%. Loadings <.3 are not shown.

Maximum Likelihood (ML) factor analysis was used with oblimin rotation. ML assumes that the data being analysed are multivariate normal. ML represents and separately estimates the unique portion of each variable measured. ML has more restricted assumptions and only analyses shared variance (latent dimensions). The ML begins with the input of Pearson product-moment correlation using squared multiple correlations to make initial estimates of communality. Theoretically based solutions, uncontaminated by unique and error variability, are produced by ML (Hair et al., 1995).

The Four Factor Model of Job-related Affective Well-being scale taps the entire affect space. Table 4 gives the ML with oblimin pattern matrix loadings for the Four Factor Model of Job-related Affective Well-being.

**Table 4:  
Four Factor Model of Job-related Affective Well-being (n = 200)**

	Pattern Matrix <sup>a</sup>			
	Factor			
	1 Enthusiasm	2 Anxiety	3 Depression	4 Relaxation
24) Enthusiastic.	1.026			
25) Motivated.	.873			
30) Optimistic.	.598			
26) Worried.		.772		
23) Anxious.		.764		
28) Tense.		.628		
29) Depressed.			.905	
32) Miserable.			.849	
21) Gloomy.			.389	
31) Relaxed.				.882
27) Restful.				.811
22) Calm.				.612

a. Rotation converged in 9 iterations.

The amount of variance explained was 77.910%. All items exhibited substantial loadings >.5, except 'Gloomy' (.389). Six of the 12-items loaded >.80, indicating the presence of a large number of marker variables. This pattern matrix supports the four factor unipolar model rather than the bipolar model. Item 1.098 loaded 1.026 on the item and factor 'Enthusiasm'. When structure matrix values are very high pattern matrix values slightly >1.00 may be obtained. This happens occasionally with empirical data since loadings are not correlations and consequently are not limited to values of <1.00 (Child, 1990).

### INTRINSIC JOB SATISFACTION

Intrinsic job satisfaction variables were predicted to be closely aligned with affective well-being. As anticipated, the Intrinsic Job Satisfaction indicators exhibited a very high internal reliability ( $\alpha = .85$ ), and loaded strongly on the predicted factor (see Table 5).

**Table 5:  
Intrinsic job satisfaction (n = 200)**

	Factor Matrix <sup>a</sup>
	Factor IntJS
33) The amount of variety in your job?	.535
34) The recognition you get for good work?	.702
35) Your chances of promotion?	.566
36) The opportunity to use your abilities?	.793
37) The attention paid to suggestions you make?	.797
38) The amount of responsibility you are given?	.757
39) The freedom to choose your own method of working?	.624

a. 1 factor extracted. 5 iterations required.

Total variance accounted for was 54.416%.

## CONFIRMATORY FACTOR ANALYSIS OF MANAGERS' PERFORMANCE INDICATORS AND VARIABLES

Answering the research questions required the development of an instrument to measure the structure of managers' contextual and task performance. An eight-dimensional measurement model of managers' performance, derived from the survey data, was tested by exploratory and confirmatory factor analyses to differentiate the structure of managers' contextual and task performance. Table 6 shows the ranked factor loading for indicators on contextual performance using subsample 1 (N = 200) on managers' self-ratings.

**Table 6:**  
**Ranked factor loading for indicators on managers' self-ratings contextual performance (n = 200)**

	Pattern Matrix <sup>a</sup>			
	Factor			
	1 Endorsing	2 Helping	3 Persisting	4 Following
58. Exhibiting a concern for organisational objectives.	.859			
57. Showing loyalty to the organisation.	.838			
60. Representing the organisation favourably to outsiders.	.755			
61. Demonstrating concern about the image of the organisation.	.698			
59. Working within the organisation to effect change.	.537			
49. Helping others who have been absent.		-.968		
48. Helping with heavy work-loads.		-.794		
50. Maintaining effective working relationships with co-workers.		-.481		
40. Demonstrating perseverance and conscientiousness.			.889	
41. Persisting with effort to complete work successfully despite difficult conditions and setbacks.			.868	
42. Putting extra effort into your job.			.588	
43. Trying to make the best of the situation, even when there are problems.			.534	
54. Obeying the rules & regulations of the organisation.				.942
53. Adhering to organisational values & policies.				.888
55. Treating organisational property with care.				.489
56. Paying attention to announcements, messages, or printed material about the organisation.				.384

a. Rotation converged in 11 iterations.

Four distinct factors are evident. Table 7 gives the alpha coefficients for the contextual performance variables.

**Table 7:**  
**Managers' self-report contextual performance: EFA data reduction by variables (n = 200)**

CONSTRUCT	N	ξ	α
Persisting	199	4	.84
Helping	179	3	.79
Following	199	4	.83
Endorsing	199	5	.88
<b>TOTAL</b>		<b>16</b>	

Note: n = 200 Matched pairs; ξ = number of constructs.

Table 8 shows the ranked factor loading for indicators on task performance using subsample 1 (N = 200) on managers' self-ratings.

**Table 8:  
Ranked factor loading for indicators on managers' self-ratings on task performance (n = 200)**

**Pattern Matrix<sup>a</sup>**

	Factor			
	1 Monitoring	2 Technical	3 Influencing	4 Delegating
118. Monitoring and overseeing appropriate use of funds within existing constraints and guidelines.	.994			
119. Monitoring and overseeing utilisation of funds.	.961			
117. Controlling budgets by allocating funds internally.	.910			
120. Controlling personnel resources.	.557			
84. Solving technical problems.		.975		
85. Applying technical expertise.		.898		
83. Providing technical advice to others in organisation.		.882		
82. Keeping technically up-to-date.		.678		
126. Persuading others in the organisation to accept your ideas and position.			.985	
127. Convincing those holding opposing or neutral opinions and promoting own positions or ideas.			.891	
125. Influencing others inside and outside of the organisation.			.803	
128. Presenting own position clearly and decisively.			.672	
122. Effectively delegating responsibility and authority.				.942
124. Delegating authority and responsibility to assist staff's professional development.				.811
121. Assigning staff duties and responsibilities consistent with their abilities as well as the organisation's needs.				.666
123. Avoiding interfering with areas of responsibility delegated to others.				.644

<sup>a</sup>. Rotation converged in 8 iterations.

Task performance indicators and alpha coefficients are presented in Table 9.

As with the contextual performance factor loadings, four distinct factors are evident. Table 9 shows the ranked factor loadings for indicators on contextual performance using subsample 1 on managers' self-ratings. Task performance indicators and alpha coefficients are presented in Table 9.

**Table 9:  
Managers' self-report contextual performance:  
EFA data reduction by variables (n = 200)**

CONSTRUCT	N	ξ	α
Technical	179	4	.91
Monitoring	162	4	.93
Delegating	187	4	.84
Influencing	196	4	.90
<b>TASK PERFORMANCE</b>		<b>16</b>	

Note: n = 200 Matched pairs; ξ = number of constructs.

Several high loading indicators were evident in both the contextual and task performance subsamples. There were seven high loading 'marker' variables (>.80) for contextual performance, and 11 task performance factors representing 18 high-loading indicators. This indicated that the limits to parsimony for this matrix had been reached.

A measurement model of managers' performance dimensions was confirmed to be multivariate and consist of eight-dimensional construct of performance was tested through CFA. The performance construct was operationalised in terms of four contextual dimensions (Endorsing, Helping, Persisting, Following) and four task dimensions (Monitoring, Technical, Influencing, Delegating). These dimensions were confirmed through multisample analysis and cross-validation techniques of managers' and superiors' ratings (N = 200 and n = 125, respectively). These dimensions were confirmed through

multisample analysis and cross-validation techniques of managers' and superiors' ratings (Hosie et al. 2004).

## **TEST OF THE MEASUREMENT MODEL**

All analyses were based on the ML method. The input for the analyses was the covariance matrices for the managers' self-report and superiors' ratings on performance indicator subsamples. The variance for each of the eight constructs was fixed at 1 and respective covariances were freely calculated. To test the hypothesised models only random error was analysed, which assumed there was no systematic error in the data. Subsample 1 was used for the CFA of both managers' and superiors' ratings of performance to ensure independence of the samples. Combining managers' self-report and superiors' rating subsamples effectively doubled the cases available for analysis. These are independent samples because no overlap is allowed in the cases. Four models of managers' performance were tested: A best fitting model was sought that separately fitted these data sets. An eight-Dimensional Model based on the a priori model of managers' four factors of context performance and four factors of task performance.

## **CONFIRMATORY FACTOR ANALYSIS OF MANAGERS' PERFORMANCE**

Accurately measuring managers' performance was a necessary precursor to answering the main research questions posed in this study. The CFA explored the construct of managers' performance in detail.

Results of the various CFA were conducted to test the measurement model. A CFA provided support for a 32 variable measure of perceived performance. The CFA on the eight performance constructs - four contextual performance and four task performance - was used to confirm the measurement model. These analyses determined the independence of the constructs. Essentially, the eight dimensions and 32 indicators, identified in the EFA, withstood a rigorous process of CFA scrutiny that covered all the relevant aspects of performance. Contextual and task performance generalises across managers and their superiors, to provide a reliable measure of performance. Clearly, superiors' ratings of managers' performance are the most reliable.

Common variance was expected because the focal person rated their performance. However, as shown through the Multitrait-Multimethod (Byrne, 1994; Byrne & Goffin, 1993) at the individual parameter level of analysis, managers' self-reports on their performance were contaminated by considerable systematic error through a tendency of the self-rated performance method to attenuate the performance effects. By contrast, the superiors' ratings of managers' performance had only a modest method variance and were therefore a reliable measure of managers' objective performance.

Evidence was presented through invariance analysis that was used to determine if there was congruence between managers' and superiors' perceptions of performance. The model fitted the structure and was suitable for cross-validation with the original sample. A common structure for both managers' and superiors' contextual and task performance was established through an examination of the form of the performance model, the invariance of loadings across the self and superiors' samples, and holding the loadings constant, a test of the invariance of the relationships amongst the performance constructs. These scales were psychometrically sound because they show high levels of reliability (internal consistency), in addition to demonstrating construct validity, and are suitable for further analysis in relation to managers' affective well-being and intrinsic job satisfaction.

In summary, the measurement model clarified the construct of managers' performance and was found to be composed of mutual and distinct measures that are generalizable across groups. The CFA findings indicated that the construct of managers' performance was multidimensional. Figure 2 provides a schematic representation of the CFA of managers' performance indicators and variables.

**Table 11:**  
**Canonical correlation with DV based on superiors'**  
**rated performance (n = 125)**

Variables	First Canonical Variate		Second Canonical Variate	
	Cross-Loadings	Standardised Coefficients	Cross-Loadings	Standardised Coefficients
<b>Performance Variable Set (DV)</b>				
Technical	.177	-.091	-.208	-.563
Monitoring	.306	.202	.252	.616
Delegating	.264	-.142	-.131	-.321
Influencing	.510	.642	-.090	-.067
Persisting	.423	.214	-.081	-.259
Helping	.245	.039	-.011	.054
Following	.221	-.070	.217	.549
Endorsing	.432	.322	.008	.013
Percent variance		37.129		10.978
				Total = 48.107
Redundancy		11.602		2.323
				Total = 13.925
<b>Affective Well-being Variable Set (IV)</b>				
PA	.389	.591	.067	.976
NA	-.096	.221	-.152	-.478
Depression	-.328	-.083	.012	-.058
Enthusiasm	.278	-.375	-.187	-1.337
Anxiety	-.179	-.117	.071	.619
Relaxation	.076	.046	.046	.595
Intrinsic Job Satisfaction	.503	.803	-.085	-.014
Percent variance		29.046		5.201
				Total = 34.248
Redundancy		9.076		1.101
				Total = 10.177
Canonical Correlation	.559 <sup>***</sup>		.460 <sup>*</sup>	

Canonical correlation and hierarchical multiple regression were used to analyse the linear combination of managers' affective well-being and job satisfaction with contextual and task performance. Indicators of affective well-being and intrinsic job satisfaction were found to predict dimensions of managers' performance, irrespective of whether the performance scores were from self-ratings or supervisory ratings.

As predicted, positive affective well-being was related to enhanced managerial performance, whereas poor affective well-being indicated diminished performance, as specified in the previous paragraph. Since the relationship between well-being and performance is positive linear, high performance is expected to be associated with high well-being, and low performance with low well-being. Thus, hypothesis 1 was confirmed.

**H 1** **Affective well-being is associated with managers' *contextual* and *task* performance (as rated by their superiors), so that;**

**high levels of affective well-being are strongly associated with higher rated performance, while low levels of affective well-being will lead to lower rated performance.**

Hypothesis 2 was also confirmed. Self-report of affective well-being variables and Intrinsic Job Satisfaction was found to predict dimensions of superiors' report on task performance. Affective well-being (PA = .330\*\*, 4.757%; Anxiety = .285\*, 4.424%; Relaxation = .274\*\*, 4.578%)<sup>2</sup> were positively associated with managers' task performance (Monitoring = .283\*\*, 6.010%) and contextual performance (Following = .252\*, 3.950%) that was negatively associated with task performance (Technical = -.259\*\*, 5.359%). However, NA (-.220\*, 2.651%) and Enthusiasm (-.615\*\*\*, 12.738%), were negatively associated with (Monitoring = .283\*\*, 6.010%; Following = .252\*, 3.950%) that was negatively associated with (Technical = -.259\*\*, 5.359%).

**H 2 Components of affective well-being are differentially associated with contextual performance and task performance.**

Hypothesis 3 was not confirmed. Enthusiasm (-.615\*\*\*, 12.738%) accounted for a large amount of unique variance and was highly significantly ( $p = <.001$ ) negatively associated with the contextual performance variable Following (.252\*, 3.950%).

**H 3 There is a positive association between managers' enthusiasm and contextual performance.**

Hypothesis 4 was not confirmed. Anxiety (.285\*) accounted for 4.424% of unique variance and was positively associated with the task performance variables Technical (-.259\*\*, 5.359%) and Monitoring (.283\*\*, 6.010%).

**H 4 There is a negative association between managers' anxiety and task performance.**

Hypothesis 5 was not confirmed. Enthusiasm (-.615\*\*\*, 12.738%) had a highly significant ( $p = <.001$ ) negative association with the contextual performance variable Following (.252\*, 3.950%). Relaxation (.274\*\*, 4.578%) was positively associated with Following but was less significant ( $p = <.01$ ) and accounted for less variance (8.16%). Anxiety (.285\*, 4.424%), an 'activation-based' affect, was positively associated with Following (.252\*, 3.950%). Depression was not a significant variable because it may be categorised as 'disengagement' rather than an 'activation based affect'.

**H 5 Enthusiasm and relaxation (pleasantness based affect) are stronger predictors of rated contextual performance than anxiety and depression (activation based affect).**

Hypothesis 6 was partly confirmed. Intrinsic Job Satisfaction (.449\*\*\*, 11.233%) had a highly significant ( $p = <.001$ ) positive association task performance variable (Influencing = .359\*\*\*, 5.935%) but not with any contextual performance variables. Endorsing, a contextual performance variable, contributed 1.507% of the unique variance for the superiors' ratings of performance but the  $\beta$  (.180) determined that this variable was not statistically significant.

**H 6 There is a positive association between managers' overall intrinsic job satisfaction and their rated contextual and task performance.**

Hypothesis 7 was partly confirmed. Affective well-being (PA = .449\*\*\*, 8.788%) had a highly significant ( $p = <.001$ ) positive association with managers' task performance dimension (Influencing = .359\*\*\*, 5.935%). Affective well-being (PA = .330\*\*, 4.757%; Anxiety = .285\*, 4.424%; Relaxation = .274\*\*, 4.578%) was positively associated with managers' contextual performance variable (Following = .252\*, 3.950%) and task performance variables (Technical = -.259\*\*, 5.359%; Monitoring = .283\*\*, 6.010%). However, the

<sup>2</sup> Coefficients in parentheses are standardised weights obtained from multiple regression analyses using the first and second canonical variates as DVs. The percentages shown indicate unique variance explained.

affective well-being variables NA (-.220\*, 2.651%) and Enthusiasm (-.615\*\*\*, 12.738%), were negatively associated with task performance variables (Technical = -.259\*\*, 5.359%; Monitoring = .283\*\*, 6.010%) and the contextual variable Following (.252\*, 3.950%). An ambiguous association between affective well-being and intrinsic job satisfaction variables was evident, specifically related to contextual and task performance variables. In other words, affective well-being and intrinsic job satisfaction variables were not supported in relation to contextual and task performance variables.

**H 7 Managers' affective well-being is positively associated with contextual performance, while managers' cognitions are positively associated with task performance.**

Hypothesis 8 was confirmed. Positive values were predicted for Intrinsic Job Satisfaction, Enthusiasm, Relaxation, Anxiety and negative values for Depression for attitudinal and affective outcomes of complexity on work pressure model. The Partial Model predicted that enriched job characteristics were associated with job satisfaction and low depression, while impoverished jobs will be associated with job dissatisfaction and depression. High work pressure will be associated with high anxiety, while low pressure will be associated with low anxiety. For 'low strain' jobs the outcomes are satisfaction, enthusiasm, relaxation, and low depression and anxiety; and for 'active jobs' the outcomes are satisfaction, enthusiasm, relaxation, anxiety and low depression.

In the first canonical variate, Intrinsic Job Satisfaction (.449\*\*\*, 11.233) was highly significantly positively associated with Influencing ( $p = <.001$ ) and contributed substantial unique variance to the performance variable Influencing and could thus be considered 'elevated'. Enthusiasm (-.615\*\*\*, 12.738) was highly *negatively* elevated and Relaxation (.274\*\*, 4.578) and Anxiety (.285\*, 4.424) were moderately *positively* elevated. All variables, except Depression, were significant and contributed considerable unique variance in the second canonical variate that was associated with the task performance variables Technical, Monitoring and the contextual performance variable Following. Depression indicates low activation.

**H 8 Managers who report intrinsic job satisfaction and enthusiasm will have elevated relaxation, anxiety and low depression.**

Hypothesis 9 was partly confirmed. Intrinsic Job Satisfaction and Enthusiasm were found to be in different uncorrelated canonical variates, in relation to managers' performance, making it difficult to confirm or disconfirm hypothesis 9. In the first canonical variate, Intrinsic Job Satisfaction (.449\*\*\*, 11.233) was highly significantly positively associated ( $p = <.001$ ) and contributed substantial unique variance to the task performance variable Influencing. In the second canonical variate, Anxiety (.285\*, 4.424) was significantly associated ( $p = <.05$ ) and contributed more unique variance than with the task performance variables Technical, Monitoring and the contextual performance variable Following.

**H 9 High performing managers will report positive intrinsic job satisfaction and high anxiety but low depression.**

Hypothesis 10 was partly confirmed. Since the relationship between affective well-being and performance was positive linear, high performance was expected to be associated with high well-being, and low performance with low well-being. As predicted, positive affective well-being (Intrinsic Job Satisfaction = .449\*\*\*, 11.233), a cognitive variable, was related to managerial performance, whereas poor performance indicated decrements in affective well-being (Anxiety = .285\*, 4.424). Depression and Enthusiasm were not significantly associated with the task performance variables Technical, Monitoring and the contextual performance variable Following and could therefore be considered low but not to have increased activation.

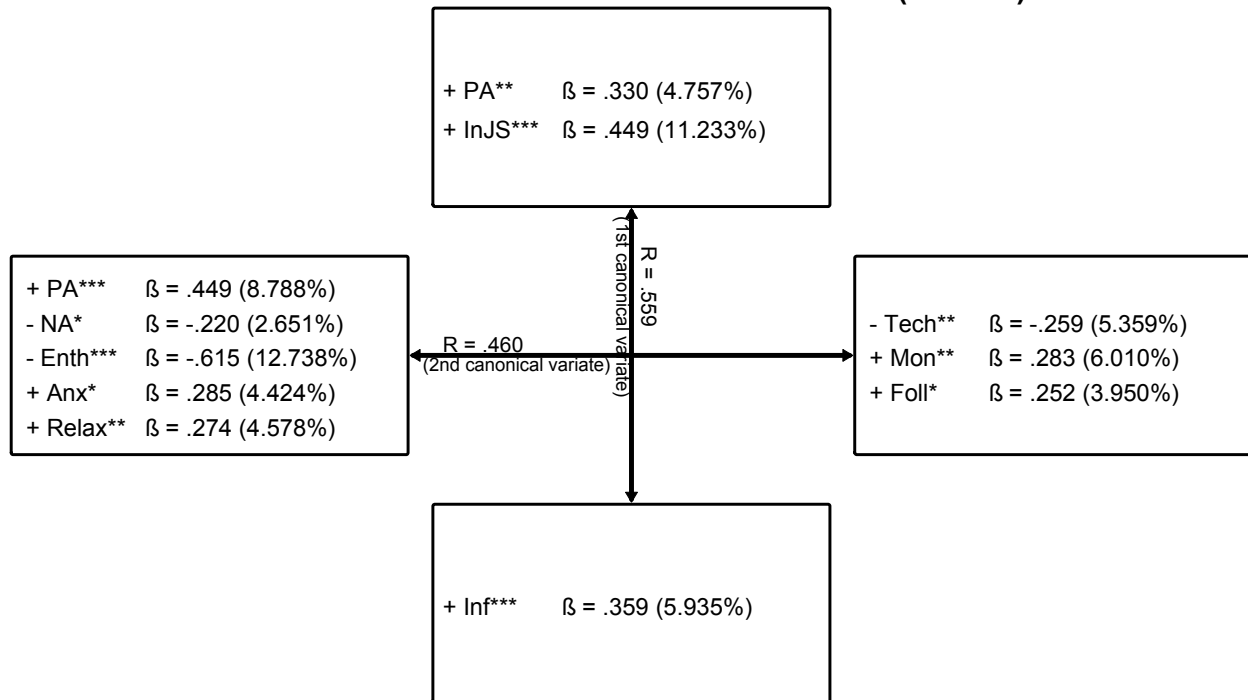
**H 10 Low performing managers will report low levels of intrinsic job satisfaction and low anxiety but increased depression.**



## ANALYSIS OF THE MODEL

A *Partial Model of Managers' Affective Well-being, Intrinsic Job Satisfaction and Performance* was developed from the literature for testing. This model was refined into two orthogonal dimensions of affective well-being, intrinsic job satisfaction and performance as illustrated in Figure 2:

**Figure 3:**  
**A Partial Model of Managers' Affective Well-being, Intrinsic Job Satisfaction and Performance (n = 125)**



Note: \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

Unless otherwise stated, it is assumed, as reported in the literature, that the direction of the relationship between the variables is from affective well-being, intrinsic job satisfaction to performance (Warr in Kahneman; Diener; & Schwarz, 1999). However, this should not be taken to infer causality between the dimensions of affective well-being, intrinsic job satisfaction and managers' performance.

The Model shows that for the first canonical variate, PA and Intrinsic Job Satisfaction are strongly associated with Influencing. PA is a trait personality characteristic associated with extroversion, and is central to managerial jobs in dealing with peers, superiors, subordinates and external constituents. Possibly, an engaging personality is the reason that individuals are promoted, or self-select into managerial positions. PA may enable managers to influence decisions from which they derive considerable Intrinsic Job Satisfaction, which has a substantial cognitive component. Alternatively, the opportunity to Influence decisions within an organization may result in enhanced Intrinsic Job Satisfaction and heightened PA.

The second canonical variate or dimension showed a complex set of relationships between aspects of affective well-being, intrinsic job satisfaction and performance. PA, Anxiety and Relaxation were positively associated with the contextual performance variable, 'Following', and the task performance variables 'Monitoring' and 'Technical', while 'NA' and 'Enthusiasm' were negatively associated with performance variables (Technical, Monitoring and Following). This indicated that high arousal (positive PA with negative NA) was present, but job dimensions were not particularly motivating (as indicated by negative Enthusiasm but positive Relaxation). This finding indicates that managers will experience arousal but low distress when undertaking transactional roles.

Another explanation for the second canonical variate may be that aspects of managers' job requiring essentially transactional or administrative roles (negative Technical, with positive Monitoring and Following) may lead to high arousal with positive PA and Anxiety, but provide opportunities for Relaxation

in conjunction with negative Enthusiasm and NA. A positive association with Monitoring and Following indicated that these performance characteristics require vigilance and consequently high arousal (Anxiety and PA with the attendant NA), but do not lead to a motivating environment (negative Enthusiasm).

However, Monitoring and Following provide opportunities for Relaxation, due to their prescriptive content that leads to acceptable levels of affective well-being. Managers also reported PA, a personality trait, to be the only variable common to both dimensions of contextual and task performance, indicating that it may be a prerequisite for managerial jobs. From this finding it could be inferred that managers will have a positive disposition to work. This has implications for the recruitment, selection and development of managers.

## **CONCLUSIONS ON RESEARCH HYPOTHESES AND MODEL**

Development and testing of the hypotheses and the model contributed to gaining an understanding of how affective well-being and intrinsic job satisfaction impact on managers' performance variables. A number of questions were investigated that were derived from the literature of affective well-being, intrinsic job satisfaction and managers' performance.

Contextual and task performance was found to be significant predictor for PA. As anticipated by Judge et al. (2001), Intrinsic Job Satisfaction was found to be associated with performance. Affective well-being self-report (PA, Intrinsic Job Satisfaction) was positively associated with a dimension of superiors' report on task performance (Influencing). Positive associations for dimensions of affective well-being self-report (PA, Anxiety and Relaxation) were negatively associated with dimensions of superiors' report on task performance (Monitoring) and contextual performance (Following). PA, Anxiety and Relaxation were also negatively associated with a task performance dimension (Technical). As predicted, positive affective well-being was related to enhanced managerial performance, whereas diminished affective well-being indicated poorer performance. Certain aspects of managers' affective well-being and intrinsic job satisfaction (Enthusiasm, PA, Intrinsic Job Satisfaction and to a lesser extent Anxiety) were found to be most influential for managers' contextual performance (Following) and task performance (Monitoring, Influencing, Technical).

A large amount of this variance of performance was explained by affective well-being and intrinsic job satisfaction that enhanced the predictive power of the Model. The first canonical variate explained 31.25% of the variance of performance and the second canonical variate explained 21.16% of the variance of performance. Thus, each of the canonical variates separately accounted for substantial amounts of managers' performance in relation to affective well-being and intrinsic job satisfaction.

Consistent with Warr's Vitamin Model, a link between managers' affective well-being, intrinsic job satisfaction and performance was evident. Also consistent with Warr's (1992) findings, those in higher-level jobs (e.g., managers) reported less job-related depression, but significantly more job-related anxiety. Positive affective well-being was related to enhanced managerial performance, whereas poor affective well-being indicated reduced performance. PA was found to be a significant predictor of task and contextual performance, supporting George and Brief's (1996) argument that positive affects (one of the indicators of extraversion) is related to distal and proximal measures of motivation.

PA, Anxiety and Relaxation were positively associated with the task performance variable Monitoring, and the contextual performance variable Following, but negatively associated with the task performance variable Technical. This result is consistent with the Hay Group (1999) finding that less than 10% of FORTUNE 500 companies attributed technical ability to result in high potential managers and leaders careers becoming 'derailed'. NA and Enthusiasm were negatively associated with Technical, Monitoring and Following, indicating a level of 'disengagement'. PA is an 'activation-based' affect that was positively associated with the task performance variable, Influencing. Thus, managers' who have high PA and intrinsic job satisfaction are more likely to influence decisions.

Technical expertise is not considered to be an important aspect of manager task repertoire. As Goleman noted "outstanding supervisors in technical fields are not technical but rather relate to handling people" (1998: 21). Managers with PA are likely to experience elevated anxiety, but have opportunities for relaxation when undertaking Monitoring and Following work. Goleman asserted that "the higher the level of the job, the less important technical skills and cognitive abilities were, and the more important competence in emotional intelligence became" (1998: 33).

Feelings of intrinsic job satisfaction are more important than money for persuading people to increase productivity (Herzberg, 1965). Remuneration only motivates people to a certain threshold of performance, beyond which affective well-being and job satisfaction are likely assist in achieving goals. Organizations providing pleasant work environments that are challenging and supportive are likely have managers who are more creative, energised and productive (Forster, 2002). Climate has been shown to have a direct impact on productivity and efficiency, accounting for up to 25% of performance (Hay Group, 1999). Thus, organizations could increase the efficacy of managers by initiating and sustaining built and emotional work environments that are in sympathy with their psyche.

## CONCLUSION

This study aimed to establish which components of managers' affective well-being and intrinsic job satisfaction predicted dimensions of their performance. A Model was proposed for linking indicators of affective well-being and intrinsic job satisfaction to a number of the dimensions of managers' performance. In the process, a new instrument was developed and refined to establish the structure of the dimensions of managers' performance.

This study was based on the popular notion that affective well-being and intrinsic job satisfaction predict performance. The 'happy-productive' worker thesis is yet to receive unequivocal empirical support. This seminal management issue was revisited using robust measures of the constructs of affective well-being, intrinsic job satisfaction and managers' performance. Rated performance of managers was previously conceived as a unidimensional construct. Multi cross-validation of self and superiors' ratings found managers' performance to be a multivariate construct consisting of both contextual and task performance.

As predicted, positive affective well-being and intrinsic job satisfaction was related to enhanced managerial performance and poor affective well-being indicated reduced performance. Affective well-being self-report (Positive Affect, Intrinsic Job Satisfaction) was found to be positively associated with a dimension of superiors' report on task performance (Influencing). Positive associations for dimensions of affective well-being self-report (Positive Affect, Anxiety and Relaxation) were found to be negatively associated with dimensions of superiors' report on task performance (Monitoring) and contextual performance (Following). This was also negatively associated with the task performance dimension (Technical).

As predicted, performance was posited to account for some of the remaining 75% of affective well-being and intrinsic job satisfaction. This study found that a considerable amount of the variance of performance was caused by affective well-being and intrinsic job satisfaction, and vice versa. Explaining a large amount of this variance made it possible to develop a model of managerial affective well-being, intrinsic job satisfaction and performance with enhanced predictive power. Using two independent DVs (supervisors' one to one ratings) of IVs (affective well-being and intrinsic job satisfaction) eliminated unnecessary noise in the data caused by common method variance.

As previously noted, the analysis described does not provide evidence of causation. As Ashkanasy, Hartel, Fischer and Ashforth stated, "[p]erformance is another likely concomitant of affect at work, though whether it is a cause or a consequence is unclear" (1991: 4). The analysis does provide for certain inferences to be made about the relationships between aspects of managers' affective well-being, intrinsic job satisfaction and performance. However, it is difficult to conclude from this study that happiness contributes to self-motivation, and that this facilitates organisational effectiveness, or that performance is a barometric of the feeling that managers are effective. Well-performing managers could also be happy as a consequence of their effective performance and the resulting rewards.

Replication of the Model and managers contextual and task performance scales is recommended. This study extended upon the existing theoretical base of managers' affective well-being, intrinsic job satisfaction and performance, by devising a Model that included performance constructs that have not been comprehensively dealt with in previous theoretical and empirical work. Specifically, measurements of contextual and task performance constructs were identified as deserving of further development. In the process of refining these scales, consideration should be given to devising a cross-cultural version of the instrument suitable for use in a range of organizations and countries.

## REFERENCES

- Ashkanasy, N.M., Hartel, C.E; Fischer, C. & Ashforth, B. (1998). A Research Program to Investigate the Causes and Consequences of Emotional Experience at Work. Paper Presented at the Annual Meeting of the Australasian Society Psychologists, Christchurch, NZ, April, 1998.
- Borman, W.C. & Brush, D.H. (1993). More Progress Toward Taxonomy of Managerial Performance Requirements. *Human Performance*, 6(1), 1-21.
- Borman, W.C. & Motowidlo, S.J. (1997). Task Performance and Contextual Performance: The Meaning for Personnel Selection Research. *Human Performance*, 10(2), 99-109.
- Byrne, B. & Goffin, R.D. (1993). Modelling MTMM Data from Additive and Multiplicative Covariance Structures: An Audit of Construct Validity Concordance. *Multivariate Behavioral Research*, 28(1), 67-96.
- Byrne, B.M. (1994a). Structural Equation Modelling with EQS and EQS/Windows: Basic Concepts, Applications and Programming. Sage, Newbury Park, CA.
- Brayfield, A.H. & Crockett, W.H. (1955). Employee Attitudes and Employee Performance. *Psychological Bulletin*, 52, 396-424.
- Brief, A.P. & Weiss, H.M. (2002). Organizational Behavior: Affect at work. *Annual Review of Psychology*, 53, 29-307.
- Cartwright, S. & Cooper, C.L. (1997). *Managing Workplace Stress*. California: Sage Publications.
- Coles, J. (1999). Life in the Fast Lane. *The Australian*, 24 November, p. 16.
- Cook, J., Hepworth, S.J., Wall, T.D. & Warr, P.B. (1981a). *A Compendium and Review of 249 Work Review Measures and Their Use*. Academic Press, London.
- Cooper, C.L. & Cartwright, S. (1994). Healthy Mind; Healthy Organization - A Proactive Approach to Occupational Stress. *Human Relations*, 47, 455-471.
- Cooper, C.L. & Williams, S. (1997). *Creating Healthy Work Organizations*. John Wiley & Sons, Chichester, NY.
- Cooper, C.L. (1996). *Handbook of Stress, Medicine and Health*. London: CRC Press.
- Cropanzano, R., & Wright, T. A. (1999). A Five-year Study of the Relationship Between Well-being and Performance. *Journal of Consulting Psychology*, 51, 252-265.
- Cropanzano, R., & Wright, T. A. (2001). When A "Happy" Worker Is Really A "Productive" Worker: A Review and Further Refinements of the Happy-Productive Worker Thesis. *Consulting Psychology Journal*, 53, 182-199.
- Cropanzano, R., James, K. & Konovsky, M.A. (1993). Dispositional Affectivity as a Predictor of Work attitudes and Job Performance. *Journal of Organizational Behavior*, 14, 595-606.
- Cummings, T. & Huse, E. (1989). *Organization Development and Change*, Fourth Edition. West Publishing Company, New York.
- Damasio, A.R. (1994). *Descartes' Error: Emotion, Reason, and the Human Brain*. New York, NY, Grosset/Putnam.
- Fisher, V.E. & Hanna, J.V. (1931). *The Dissatisfied Worker*. New York: Macmillan, pp. 260.
- Forster, N. & Still, L. (2001). *A Report on the Effects of Occupational Stress on Managers and Professionals in Western Australia*. Centre for Women and Business, Graduate School of Management, The University of Western Australia and the Australian Institute of Management (WA).

- Forster, N. (2002). *The Human Dimension: A Complete Guide to Leading and Managing People at Work* (in press).
- Ganster, D.C. & Schaubroeck, J. (1991). Work Stress and Employee Health. *Journal of Management*, 17, 235-272.
- Gebhardt, D. & Crump, C.E. (1990). Employee Fitness and Wellness Programs in the Workplace. *American Psychologist*, 45, 262-272.
- George, J.M. & Bettenhausen, K. (1990). Understanding Prosocial Behavior, Sales Performance, and Turnover: A Group Level Analysis In A Service Context. *Journal of Applied Psychology*, 75, 798-709.
- George, J.M. & Brief, A.P. (1992). Feeling Good – Doing Good: A Conceptual Analysis of the Mood at Work-Organizational Spontaneity Relationship. *Psychological Bulletin*, 112(2), 310-329.
- Goleman, D. (1998). *Working with Emotional Intelligence*. Bantam Books, London.
- Hamel, G. & Prahalad, C. (1994). Competing for the Future. *Harvard Business Review*, July-August, 122-128.
- Hamel, G. (1996) Strategy as Revolution. *Harvard Business Review*, July-Aug, 69-82.
- Handy, C.B. (1996). *Beyond Certainty: The Changing Worlds of Organizations*. Harvard Business School Press, Boston.
- Harter, J.K. Schmidt, F.L & Hays, T.L. (2002). Business-unit-level Relationship Between Employee Satisfaction, Employee Engagement, and Business Outcomes: A Metanalysis. *Journal of Applied Psychology*, 87. pp 268-279.
- HayGroup (1999). *What Makes Great Leaders: Rethinking the Route to Effective Leadership*. Findings from Fortune Magazine/Hay Group 1999 Executive Survey of Leadership Effectiveness.
- HayGroup (1999). *What Makes Great Leaders: Rethinking the Route to Effective Leadership*. Findings from Fortune Magazine/Hay Group 1999 Executive Survey of Leadership Effectiveness.
- Hershey, H.B. (1932). *Worker Emotions in Shop and Home: A Study of Individual Workers from the Psychological and Physiological Standpoint*, Philadelphia, University Pennsylvania Press.
- Herzberg, F. (1966). *The Work and the Nature of Man*. Cleveland, OH: The World Publishing Company.
- Hoppock, R. (1935). Job Satisfaction. New York. Harper, p.305.
- Hosie, P., Sevastos, P. & Cooper, C.L. (2006). Happy-Performing Managers: Impact of affective wellbeing and intrinsic job satisfaction in the workplace. Edgar Elgar (in press).
- Iaffaldano, M.T. & Muchinsky, P.M. (1985). Job Satisfaction and Job Performance: A Meta-Analysis. *Psychological Bulletin*, 97, 251-273.
- Iaffaldano, M.T. & Muchinsky, P.M. (1985). Job Satisfaction and Job Performance: A Meta-Analysis. *Psychological Bulletin*, 97, 251-273.
- James, R., Milton, J. & Gibb, R. (2000). Emotion in Learning – A Neglected Dynamic. *Research and Development in Higher Education*, 22, 87.
- Jones, G.R. (1995). *Organizational Theory: Text and Cases*. Addison-Wesley, MA.
- Judge, T.A., Thoresen, C.J., Bono, J.E. & Patton, G.K. (2001). The Job Satisfaction-Job Performance Relationship: A Qualitative and Quantitative Review. *Psychological Bulletin*, 127: 376-407.

- Kahn, H. & Cooper, C.L. (1993). *Stress in the Dealing Room: High Performers Under Pressure*. Routledge, London.
- Katzell, R.A. & Thompson, D.E. (1995). Work Motivation: Theory and Practice. In D.A. Kolb, J.S. Osland & I.M. Rubin (Eds), *The Organizational Behaviour Reader*, 6th ed. Prentice-Hall, Englewood Cliffs, NJ, pp. 110-124.
- Kelloway, K.E. & Barling, J. (1991). Job Characteristics, Role Stress and Mental Health. *Journal of Occupational Psychology*, 64, 291-304.
- Ledford, G.E. Jr (1999). Happiness and Productivity Revisited. *Journal of Organizational Behavior*, 20(1), 31-34.
- Lee, T. & Ashforth, B.E. (1996). A Meta-Analytic Examination of the Correlates of the Three Dimensions of Job Burnout. *Journal of Applied Psychology*, 81, 123-133.
- Levi, L. (1990). Occupational Stress: Spice of Life or Kiss of Death? *American Psychologist*, 45, 1142-1145.
- Locke, E.A. (1976). The Nature and Causes of Job Satisfaction. In M.D. Dunnette (Ed), *Handbook of Industrial and Organizational Psychology*. Rand McNally, Chicago, pp.1297-1349.
- Mayer, J.D. & Salovey, P. (1993). The Intelligence of Emotional Intelligence. *Intelligence*, 17(4), 433-442.
- Millar, D.J. (1990). Mental Health and the Workplace. An Interchangeable Partnership. *American Psychologist*, 45, 1165-1166.
- Mitchell, T. (1979). Organizational Behaviour. *Annual Review of Psychology*, 8, 44.
- Nicholson, N. (2000). *Managing the Human Animal*. Crown Publishers, New York, NY.
- Organ, D.W. & Paine, B.P. (1999). A New Kind of Performance for Industrial and Organisational Psychology: Recent Contributions to the Study of Organisational Citizenship Behaviour. In C.L. Cooper & I.T. Robertson (Eds), *International Review of Industrial and Organisational Psychology*, 14, John Wiley & Sons, Chichester NY, pp.338-368.
- Patterson, M., West, M.A., Lawthom, R. & Nickell, S. (1998). Impact of People Management Practices on Business Performance. *Issues in People Management*, No 22. Institute of Personnel and Development.
- Reinhold, B.R. (1997). *Toxic Work: How to Overcome Stress, Overload and Burnout and Revitalize Your Career*. Plume Publishers.
- Roethlisberger, F.J. & Dickson, W.J. (1939). *Management and the Worker*, Cambridge, MA: Harvard University Press, p.615.
- Salovey, P. & Mayer, J.D. (1990). Emotional Intelligence. *Imagination, Cognition and Personality*, 9, 185-211.
- Sevastos, P.P. (1996). *Job-Related Affective Well-Being and Its Relation to Intrinsic Job Satisfaction*. Unpublished PhD Thesis, Curtin University, Perth, Australia.
- Staw, B.M. & Barsade, S.G. (1993). Affect and Managerial Performance. *Administrative Science Quarterly*, 38, 304-331.
- Staw, B.M. (1984). Organizational Behavior: A Review and Reformulation of the Field's Outcome Variables. *Annual Review of Psychology*, 35, 627-666.
- Staw, B.M. (1986). Organisational Psychology and the Pursuit of the Happy/Productive Worker. *California Management Review*, 28, 40-53.

- Strauss, G. (1968). Relations-1968 Style. *Industrial Relations*, 7, 262-276.
- Theorell, T. (1993). Influence Exercised on the Surrounding Field In Psychosomatic Projects. *Psychotherapie Psychosomatik Medizinische Psychologie*, 43(5), 183-187.
- US Department of Labor (1991). *What Work Requires of Schools*. Secretary's Commission on Achieving Necessary Skills (SCANS), Washington USA.
- Vroom, V.H. (1964). *Work and Motivation*. Wiley, New York.
- Warr, P. (1987). *Work, Unemployment and Mental Health*. Oxford University Press.
- Warr, P. (1990b). The Measurement of Well-Being and Other Aspects of Mental Health. *Journal of Occupational Psychology*, 63(3), 193-210.
- Warr, P. (1999). Well-being and the Workplace. In Kahneman, D., Diener, E. & Schwarz, N. (Eds), *Well-being: The Foundations of Hedonic Psychology*. Russell Sage Foundation, New York. pp. 392-412. NY.
- Warr, P.B. (1995b). Employee Well-Being. In P.B. Warr (Ed), *Psychology at Work*, Fourth Edition. Harmondsworth: Penguin.
- Weick, K.E. (1979). *The Social Psychology of Organizations*. Addison-Wesley, Reading, Mass.
- Wernefelt, B. (1984). Resource-Based View of the Firm. *Strategic Management Journal*, 5, 171-180.
- West, M., Arnold, J., Corbett, M. & Fletcher, B. (1992). Editorial: Advancing Understanding About Behaviour at Work. *Journal of Occupational and Organisational Psychology*, 65, 1-3.
- Williams, D.G. (1989). Neuroticism and Extraversion in Different Factors of the Affect Intensity Measure. *Personality and Individual Differences*, 10, 1095-1100.
- Wright, T. A., & Cropanzano, R. (2000). Psychological Well-Being and Job Satisfaction as Predictors of Job Performance. *Journal of Occupational Health Psychology*, 5, 84-94.
- Wright, T.A. & Staw, B.M. (1999a). Affect and Favorable Work Outcomes: Two Longitudinal Tests of the Happy-Productive Worker Thesis. *Journal of Organizational Behavior*, 20, 1-23.
- Wright, T.A. & Staw, B.M. (1999b). Further Thoughts on the Happy-Productive Worker. *Journal of Organizational Behavior*, 20, 31-34.

# Working Paper Series 2005

## School of Management

**Series Editor: Assoc Prof Alan R Nankervis**

### Working Papers

2005-1 G. Thompson and C. Pforr "Policy Networks and Good Governance – A Discussion".

2005-2 P. Hosie and P. Sevastos "Are happy managers more productive?"

***Enquiries about Working Papers, or submissions to:***

***The Editor, Working Paper Series 2005***

Assoc Prof Alan Nankervis  
School of Management  
Curtin University of Technology  
GPO Box U1987  
Perth Western Australia 6845  
Telephone: + 61 8 9266 7413  
Facsimile: + 61 8 9266 7897  
Email: [Alan.Nankervis@cbs.curtin.edu.au](mailto:Alan.Nankervis@cbs.curtin.edu.au)

***School Secretary***

Ms Tonia Geneste  
School of Management  
Curtin University of Technology  
GPO Box U1987  
Perth Western Australia 6845  
Telephone: + 61 8 9266 7292  
Facsimile: + 61 8 9266 7897  
Email: [Tonia.Geneste@cbs.curtin.edu.au](mailto:Tonia.Geneste@cbs.curtin.edu.au)

[www.cbs.curtin.edu.au](http://www.cbs.curtin.edu.au)



# Curtin

UNIVERSITY OF TECHNOLOGY

---

The School of Management at Curtin University of Technology has an international reputation for its research and teaching in areas of management such as international business, general management, human resource management and industrial relations, small business, entrepreneurship and tourism management. The School's research expertise is on all aspects of services management in the Asia Pacific region.

All Working Papers are peer reviewed. The views expressed in Departmental Working Papers are those of author(s) and do not necessarily reflect the view of the School of Management. Readers of the Working Papers are encouraged to contact the author(s) with comments, criticisms and suggestions.

Further information and copies of the papers (either in hard copy and/or adobe format via email) may be obtained by contacting the Editor, School of Management Working Paper Series, at the School of Management, Curtin University of Technology (GPO Box U1987, Perth WA 6845). Email address: [Alan.Nankervis@cbs.curtin.edu.au](mailto:Alan.Nankervis@cbs.curtin.edu.au) .