

THE ROLE OF ENTREPRENEURIAL CHARACTERISTICS IN PREDICTING JOB SATISFACTION

René van Wyk

Department of Business Management, University of Pretoria

Mandla Adonisi

The Gordon Institute of Business Science, University of Pretoria

Abstract

This study investigates the prediction of job satisfaction using the important entrepreneurial characteristics of corporate entrepreneurship (CE), market orientation (MO) and organisational flexibility (F). In this study, Structural Equation Modelling (SEM) was used to predict the causal relationship between these entrepreneurial characteristics and job satisfaction (JS) as the outcome variable. It was found that the corporate entrepreneurship factors of work discretion, work improvement and rewards/reinforcement displayed a statistically significant common variance of ≥ 25.00 with extrinsic job satisfaction. The four Structural Equation Models built in this study indicated a reasonable to good fit with the data. Since all the entrepreneurial variables investigated can be controlled by management, it follows that the application of the research findings of this study can go a long way toward improving job satisfaction and possibly organisational performance through innovative entrepreneurial activities.

JEL J28, L26

1 Introduction

Job satisfaction is probably one of the most frequently studied variables in organisational behaviour, but the factors that lead to job satisfaction are not yet fully clear. It is important to investigate this construct, because of the reciprocal relationship between job satisfaction and different forms of work behaviour (Knoop, 1995; Luthans, 1998; Robbins, 2001). Weiss, Dawis, England and Lofquist (1967: 13) refer to job satisfaction as the actual satisfaction of the individual with intrinsic and extrinsic reinforcers. Job satisfaction can be regarded as the equilibrium sought by an individual in relation to intrinsic and extrinsic environmental factors leading to work contentment (Dawis, Lofquist & Weiss, 1968).

McCormick and Illgen (1985) distinguish between intrinsic and extrinsic job satisfaction as follows: intrinsic satisfaction is described as a person's experiencing of a sense of competence,

while extrinsic satisfaction is described as contentment derived from external rewards. Job satisfaction in its broadest sense refers to a person's general attitude toward the job or toward specific dimensions of the job (Knoop, 1995; Robbins, 2001). Knoop (1995) argues that job-related attitudes tend to cluster in certain categories. So, for example, a person who has developed a favourable attitude toward one aspect of the job based on good experience is likely to react favourably to other related job aspects.

Many studies have already been done on job satisfaction (Knoop, 1995; Luthans, 1998; Robbins, 2001). The current study provides empirical evidence on how the important phenomenon of job satisfaction is influenced by corporate entrepreneurship, flexible business management and a pro-active market orientation. There are many factors that influence job satisfaction and they change constantly as increased global competition demands new ways of managing (Michie & Padayachee, 1997);

and organisations are being forced to rethink how they produce and deliver products and services (Kemelgor, 2002). All this affects the job satisfaction of workers at ground level.

According to Barrett and Weinstein (1998), corporate entrepreneurship, the flexibility of business management and a pro-active market orientation are the dynamic factors that need to be acknowledged in an increasingly competitive global economy. A lack of entrepreneurial innovation could lead to stagnation and erosion in a company's market share, followed rapidly by failure (Kemelgor, 2002). The continuous healthy practice of corporate entrepreneurship prevents stagnation, rejuvenates businesses, leads to a competitive advantage (Bhardwaj, Sushil & Momaya, 2007: 131) and creates long-term growth (Bhardwaj, Camillus & Hounshell, 2006: 248). The practical application of a corporate entrepreneurial approach implies that a flexible method needs to be used (Bhardwaj & Momaya, 2007). Flexibility and innovativeness are becoming increasingly vital in a corporate entrepreneurial culture (Nayager & Van Vuuren, 2005: 29). Organisational flexibility in businesses allows for proactive planning in highly complex, dynamically changing business environments (Kukalis, 1989) and uncertain conditions (Volberda, 1999). A pro-active market orientation implies the organisation-wide generation of market intelligence, responding to the needs of customers with the vertical and horizontal market intelligence generation of an organisation (Kohli, Jaworski & Kumar, 1993; Slater & Narver, 1994). Quite aside from the competitive advantages that the entrepreneurial characteristics of corporate entrepreneurship, the flexibility of business management and a pro-active market orientation can bring to a business, they could also lead to the additional advantage of job satisfaction, as investigated in this study.

2

Literature review

High demands are made on firms in turbulent economic environments – they continually have to innovate to remain competitive and maintain the organisations' well-being (Herbert

& Brazeal, 1998; Kemelgor, 2002). Corporate entrepreneurial activities are regarded as important for the advancement and growth of an organisation (Covin & Miles, 1999; Goosen, De Coning & Smit, 2002; Hornsby, Kuratko & Zahra, 2002). Corporate entrepreneurship is the catalyst that reinvigorates an organisation by offering the possibility of a competitive advantage and improved performance (Nayager & Van Vuuren, 2005: 34). The term "corporate entrepreneurship" refers to a process in which businesses engage in order to diversify by means of internal growth and expansion (Sharma & Chrisman, 1999), creating new ventures within existing businesses to ensure profitability and enhance competitiveness (Zahra, 1991). As there is no universal definition of corporate entrepreneurship, the term is often used interchangeably with expressions such as intrapreneurship (Kuratko, Montagnano & Hornsby, 1990) and corporate venture (Ellis & Taylor, 1987). Previous studies have indicated that there is a significant positive relationship between intrapreneurial activity and job satisfaction (Katz, 1993; Rutherford & Holt, 2007; Van Wyk, 1998; Weaver & Franz, 1992).

Innovativeness at the corporate entrepreneurial level is closely linked to the market orientation and flexibility of an organisation (Barrett & Weinstein, 1998). An organisation's market orientation refers to the firm's implementation of the marketing concept through its intelligence generation, dissemination and responsiveness (Kohli & Jarwoski, 1990). Narver and Slater (1990) define market orientation as the effective and efficient management of an organisational culture that promotes behaviours leading to superior value which is received by customers. This implies superior performance by a business, and such performance is based on customer-oriented, competitor-oriented and long-term-oriented inter-functional coordination with profit as its goal. An organisation's market orientation refers to the culture in a firm that most effectively and efficiently develops the kinds of behaviour that are necessary for the creation of superior value for buyers and thus of continuous superior performance for the business (Narver & Slater, 1990). A robust market orientation decreases business uncertainties, lowering

an organisation's proneness to risk (Esteban, Millán, Molina & Martin-Consuegra 2002). It also helps to make a business customer-focused and encourages collaboration between departments with a strategic approach (Ward, Girardi & Lewandowska, 2006).

Some previous attempts to measure the relationship between market orientation and job satisfaction have shown a significantly positive relationship (Barrett & Weinstein, 1998; Farrell, 2005; Liu, Luo & Shi, 2002; Luo, Zhou & Liu, 2005; Matsuno, Mentzer & Özsoyner, 2002; Mengüç, 1996; Sigauw, Brown & Widing, 1994; Wood, Bhuian & Kiecker, 2000). Fountain (1999) argues that market orientation could play a role in preventing job dissatisfaction. However, another study suggested that the relationship was insignificant (Oleski, 2000). In a study by Kwaku and Ko (2001) of 145 firms identified as either oriented toward both corporate entrepreneurship and/or market orientation, a one-way ANOVA indicated that organisations that scored high on both corporate entrepreneurship and market orientation also tended to score significantly higher on perceived new product performance than organisations that were either only inclined to corporate entrepreneurship or were only market-oriented, or were identified as conservative in both areas. The same study indicated a significant positive correlation between corporate entrepreneurship and market orientation ($r = 0.39$; $p < 0.001$). Contrary to these findings, Stratemeyer (2002) indicated that a study of 48 college professors and 1 184 students showed that market orientation is negatively related to job satisfaction. However, Stratemeyer does not report the statistical procedures and numerical findings used in that study. Moreover, it can be argued that the academic sample in that study is not representative of individuals actively involved in organisational marketing.

Matsuno *et al.* (2002) argue that, on their own, neither corporate entrepreneurship nor market orientation may bring about sufficient willingness by organisations to capture opportunities in the markets successfully. Organisational flexibility (F) also seems to play an important role. It seems that market orientation is also significantly related to

organisational flexibility (Barrett & Weinstein, 1998; Grewal & Tansuhaj, 2001).

Just as important as the link between corporate intrapreneurial activities and marketing is the need for flexibility, for a realignment of organisations' resources to meet new demands (Bhardwaj & Momaya, 2007; Hatum & Pettigrew, 2006; Lansley, 1983; Volberda, 1999). Kukalis (1989) suggests that firms in highly complex entrepreneurial environments need flexible planning systems to deal with the frequent changes in their environments. As the global business environment becomes increasingly dynamic, organisations must look for ways to increase their flexibility to be able to react to changing conditions. "Organisational flexibility" is defined as the ability of a firm to respond rapidly and effectively in providing the market with new products and services (Stohr & Zur Meuhlen, 2007). It refers to the ability of an organisation to change pro-actively by inventing and supplying pioneering products and services (Stohr & Zur Meuhlen, 2007). Firms that exhibit low flexibility are demonstrably more rigid in their administrative relations than other organisations and they tend to adhere strictly to bureaucratic practices (Barrett & Weinstein, 1998; Kwandwalla, 1987).

The ability of employees to exercise self-control successfully and to enjoy work autonomy is a cornerstone of structural flexibility (Long, 2001). Using Multiple Regression Analysis, Oleski (2000) indicates in a study of 110 full-time workers that flexibility has no direct effect on job satisfaction (actual measures are not provided). In conjunction with flexibility, corporate entrepreneurship serves as a gateway for the development of new ventures (Bhardwaj & Momaya, 2007). A significant positive correlation between corporate entrepreneurship and organisational flexibility is also confirmed by Barrett and Weinstein (1998), as well as by Barringer and Bluedorn (1999). Jablecka (2001) proposes that an organisation that nurtures flexibility and continuous market assessment can pave the way to successfully capturing an innovative entrepreneurial competitive advantage. Similarly, Bhardwaj and Momaya (2007) argue that the advancement of corporate entrepreneurship and organisational flexibility

can lead to strategies and competitive approaches which include new ventures and technology, product and service development.

3 Aim and focus of this study

The aim of this study was to investigate the predictive potential of using the characteristics of corporate entrepreneurship (CE), market orientation (MO) and organisational flexibility (F) to predict job satisfaction (JS). The current study investigates the prediction of intrinsic and extrinsic job satisfaction, as defined by Weiss *et al.* (1967: 13) as “the actual satisfaction of the individual with intrinsic and extrinsic reinforcers” associated with the person’s job. The sum of the individual’s expectations regarding the job and what the job offers (Locke, 1976) was investigated, as predicted by corporate entrepreneurial activities, the market orientation and flexibility of the organisation. This study is an extension of the work by Kuratko *et al.* (1990), and Hornsby, Kuratko and Montagno (1999). These authors have developed a tool that assesses some of the organisational factors that foster a corporate entrepreneurship culture in an organisation.

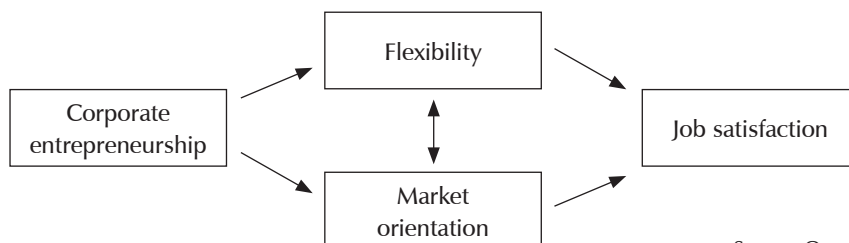
Although past and current research efforts have focused on corporate entrepreneurship and its relationship to market orientation and organisational flexibility (Barrett & Weinstein, 1998), as far as could be established, no empirical research has been directed at understanding the effect(s) of corporate entrepreneurship and organisational flexibility and market orientation on job satisfaction internationally

or within the South African context. The central argument advanced by the present study is that corporate entrepreneurship promotes strategic agility, creativity and continuous innovation throughout the firm. It is further argued that corporate entrepreneurship fosters a corporate culture that facilitates the identification of opportunities, the discovery of new sources of value, and product and process innovation that lead to greater organisational performance. Corporate entrepreneurship can therefore be conceptualised as the strategic force that drives effective market orientation and organisational flexibility, which could generate high levels of job satisfaction among an organisation’s members.

4 Modelling the relationships between corporate entrepreneurship, market orientation, organisational flexibility with job satisfaction as the outcome variable

The purpose of this study is to determine the relationships between corporate entrepreneurship, market orientation and organisational flexibility and their relative influence on job satisfaction. The proposed relationships between these variables are illustrated in Figure 1. The results of such an equation could indicate to managers which intrapreneurial concepts, as well as market and flexibility orientations could play a role in the job satisfaction of the employee. Employee job satisfaction could consequently lead to positive internal and external job satisfactory outcomes in the organisation.

Figure 1
Modelling of the relationships between corporate entrepreneurship, market orientation and organisational flexibility, with job satisfaction as the outcome variable



Source: Own compilation

The following research questions are related to the above discussion:

1. What is the relationship between job satisfaction, corporate entrepreneurship, market orientation, and organisational flexibility?
2. Can job satisfaction be significantly predicted by corporate entrepreneurship, market orientation and organisational flexibility?

5 Methodology

A survey research design was used in this study. According to Kerlinger and Lee (2000), survey research is useful in studying the relative incidence, distribution and interrelations of sociological and psychological variables. For this reason, survey research can be classified as field studies with a quantitative orientation (Kerlinger & Lee, 2000).

A non-random quota convenience sample was drawn of individuals identified in top and middle management in four different economic sectors. A questionnaire was circulated to a selected sample of managers. The questionnaire included a covering letter, the instruments measuring job satisfaction, corporate entrepreneurship, market orientation and flexibility, as well as biographical questions. Letters containing the different instruments were sent to the supervisors and managers of a life insurance company, an information technology firm, administrative and teaching staff from a technikon, and top managers from a parastatal in the transport sector.

6 The sample

A N=333 convenience, non-random sample of managers was selected from companies from four different economic sectors: mainly life insurance (N=266), with a smaller sample from information technology (N = 33), from a technikon (N = 26) and a parastatal organisation in the transport sector (N = 8). The 396 responses received from the

951 questionnaires sent out resulted in a response rate of 42 per cent. Sixty-three of the 396 responses could not be used because of uncompleted items in the psychometric instruments (only the usable responses, namely 333, are referred to in the rest of the paper). Of the usable responses in the sample, 144 responses came from males and 187 from females. Two individuals did not indicate their gender. The ages of the respondents varied between 21 and 70 years (M = 36.66 and SD = 9.26 years). Most of the respondents indicated that English (N = 202) was their home language, 86 were Afrikaans-speaking and 45 spoke an African language at home. Most of the respondents had a post-school certificate or diploma (N= 105), followed by 87 who had a Grade 12 qualification, 46 who had a secondary school qualification, 38 who had a bachelor's degree, 33 who had an Honours degree and 17 who had master's degrees. Seven respondents did not indicate their qualifications.

7 The measurements

The Corporate Entrepreneurial Assessment Instrument (CEAI) designed by Hornsby *et al.* (2002) was used to measure corporate entrepreneurship. The instrument consists of 48 items. Responses were given using a five-point Likert-type questionnaire, varying between 1 (for "strongly disagree") to 5 ("strongly agree"). A total of 11 negatively worded items were included to overcome response tendencies. The Cronbach Alphas of the five measured factors were management support (0.89), work discretion (0.80), rewards/reinforcement (0.65), time availability (0.92) and organisational boundaries (0.58) with re-test reliabilities of 0.89, 0.87, 0.75, 0.77 and 0.64 respectively.

The MARKOR instrument developed by Kohli *et al.* (1993) was used to measure market orientation, by means of 32 items measuring three components: intelligence generation, intelligence dissemination and responsiveness. The test uses a seven-point Likert scale. Confirmatory Factor Analysis indicated a very weak model fit, with goodness-of-fit indices of between only 0.656 and 0.740.

Kwandwalla's (1987) organisational flexibility scale was used to measure the adaptability of an organisation. Kwandwalla (1987) indicates that this scale has one factor (the psychometric properties are not furnished).

Job satisfaction was measured by using the short form of the Minnesota Job Satisfaction Questionnaire (Weiss *et al.*, 1967). This questionnaire consists of 20 items, measured on a five-point Likert-type scale, varying between "very dissatisfied" to "very satisfied". The Cronbach Alphas were 0.86 for intrinsic job satisfaction, 0.80 for extrinsic job satisfaction and 0.90 for general job satisfaction.

8 Statistical analysis

In order to minimise error variance and investigate the portability of the different items, Principal Factor Analysis was done, with Direct Quartimin Rotation of the axis on

all the responses for all the instruments. The results indicated that job satisfaction consisted of two factors (extrinsic and intrinsic), with Cronbach Alpha coefficients of 0.86 and 0.85 respectively. Factor analysis on the Corporate Entrepreneurship Assessment Instrument indicated a five-factor solution consisting of support for innovation ($\alpha = 0.88$), work discretion ($\alpha = 0.84$), work improvement ($\alpha = 0.85$), rewards/reinforcement ($\alpha = 0.77$) and time availability ($\alpha = 0.71$). The Market Orientation Questionnaire resulted in three factors, namely intelligence generation, inertia and responsiveness, with Cronbach Alpha coefficients of 0.81, 0.83 and 0.74 respectively. The factor analysis on the Flexibility Instrument resulted in two factors, namely formality and authoritarianism, with Cronbach Alpha coefficients of 0.81 and 0.64 respectively.

A description of the different factors that resulted from the factor analyses is reported in Table 1.

Table 1
Description of different factors as applied in the statistical analyses

Variable	Description
MO1	Market orientation: intelligence generation
MO2	Market orientation: inertia
MO3	Market orientation: responsiveness
JS1	Job satisfaction: extrinsic
JS2	Job satisfaction: intrinsic
F1	Flexibility: formality
F2	Flexibility: authoritarianism
CE1	Corporate entrepreneurship: support for innovation
CE2	Corporate entrepreneurship: work discretion
CE3	Corporate entrepreneurship: work improvement
CE4	Corporate entrepreneurship: rewards/reinforcement
CE5	Corporate entrepreneurship: time availability
MOT	Total market orientation
JST	Total job satisfaction
FT	Total flexibility
CET	Total corporate entrepreneurship

The relationships between the job satisfaction sub- and total scales and the factors identified for corporate entrepreneurship, market orientation and flexibility were investigated by means of Pearson Product Moment Correlation. The prediction of job satisfaction sub- and total scales as the dependent variables, with the corporate entrepreneurship, market orientation and flexibility sub-scales and totals as the independent variables was done by means of Multiple Regression Analyses. The interpretation of these statistical results, together with the theoretical arguments, was

used to build four different Structural Equation Models (SEMs) to predict the extrinsic and intrinsic job satisfaction sub-scales.

9 Empirical results

The first research question (concerning the relationships between corporate entrepreneurship, market orientation, flexibility variables and job satisfaction) was investigated by means of Pearson Product Moment correlations (see Table 2).

Table 2
Pearson Product Moment Correlations for corporate entrepreneurship and psychometric variables and job satisfaction (N = 333)

Variable	MO1	MO2	MO3	JS1	JS2	F1	F2	CE1	CE2	CE3	CE4	CE5
MO1	1.000											
MO2	-0.35 0.0001	1.000										
MO3	0.36 0.0001	-0.52 0.0001	1.000									
JS1	0.36 0.0001	-0.28 0.0001	0.21 0.0001	1.000								
JS2	0.29 0.0001	-0.18 0.0009	0.23 0.0001	0.62 0.0001	1.000							
F1	0.35 0.0001	-0.21 0.0001	0.24 0.0001	0.39 0.0001	0.31 0.0001	1.000						
F2	-0.09 0.1027	0.21 0.0002	-0.15 0.0051	-0.35 0.0001	-0.18 0.0010	-0.17 0.0329	1.000					
CE1	0.41 0.0001	-0.30 0.0001	0.43 0.0001	0.31 0.0001	0.22 0.0001	0.36 0.0001	-0.25 0.0001	1.000				
CE2	0.28 0.0001	0.06 0.29	0.03 0.5803	0.58 0.0001	0.47 0.0001	0.35 0.0001	-0.22 0.0001	0.37 0.0001	1.000			
CE3	0.45 0.0001	-0.48 0.0001	0.45 0.0001	0.51 0.0001	0.41 0.0001	0.40 0.0001	-0.34 0.0001	0.52 0.0001	0.34 0.0001	1.000		
CE4	0.36 0.0001	-0.22 0.0001	0.23 0.0001	0.61 0.0001	0.45 0.0001	0.28 0.0001	-0.25 0.0001	0.36 0.0001	0.41 0.0001	0.48 0.0001	1.000	
CE5	0.02 0.6993	-0.06 0.2684	-0.04 0.5080	0.15 0.0067	-0.05 0.4019	-0.03 0.5668	-0.8 0.1647	0.14 0.0089	0.09 0.0855	0.08 0.1283	0.08 0.1319	1.000

MOT	0.73 0.0001	0.33 0.0001	0.23 0.0001	0.17 0.0022	0.19 0.0006	0.22 0.0001	0.04 0.5150	0.27 0.0001	0.21 0.0001	0.16 0.0042	0.21 0.0001	-0.04 0.4448
JST	0.37 0.0001	-0.26 0.0001	0.24 0.0001	0.92 0.0001	0.88 0.0001	0.39 0.0001	-0.31 0.0001	0.30 0.0001	0.46 0.0001	0.51 0.0001	0.60 0.0001	.07 .2181
FT	0.28 0.0001	-0.09 0.0928	0.15 0.0060	0.18 0.0008	0.20 0.0002	0.87 0.0001	0.39 0.0001	0.21 0.0001	0.16 0.0039	0.20 0.0002	0.14 0.0103	-0.07 0.2206
CET	0.48 0.0001	-0.35 0.0001	0.37 0.0001	0.59 0.0001	0.40 0.0001	0.41 0.0001	-0.34 0.0001	0.82 0.0001	0.66 0.0001	0.73 0.0001	0.67 0.0001	0.36 0.0001

Pearson Product Moment Correlation indicated significant positive correlations between extrinsic job satisfaction and the corporate entrepreneurial sub-scales of work discretion, work improvement and rewards, with common variances of 22.64, 26.01 and 37.21 per cent respectively. The two market orientation sub-scales of intelligence generation and responsiveness correlated significantly positively with extrinsic and intrinsic job satisfaction. The sub-scale inertia correlated significantly negatively with extrinsic job satisfaction, with common variances of 12.96, 4.41 and 7.84 per cent respectively. Extrinsic job satisfaction correlated significantly positively with the formality flexibility sub-scale ($r = 0.39$; $p = 0.0001$) and significantly negatively with the authoritarianism sub-scale ($r = -0.35$; $p = 0.0001$).

Intrinsic job satisfaction correlated significantly positively with the corporate entrepreneurial sub-scales of work discretion, work improvement

and rewards, with common variances of 22.09, 16.84 and 20.25 per cent respectively. Intrinsic job satisfaction also correlated significantly positively with the two market orientation sub-scales of intelligence generation and responsiveness ($r = 0.29$; 0.23 ; $p = 0.0001$ respectively) and significantly negatively with inertia ($r = -0.18$; $p = 0.0001$). The relationships with the formality and authoritarianism flexibility sub-scales were respectively significantly positive and significantly negative ($r = 0.31$; $p = 0.0001$) and ($r = -0.18$; $p = 0.001$). The predictability of these variables, regressed on the job satisfaction sub-scales, was investigated further by means of Multiple Regression Analysis.

In order to answer the second research question, Multiple Regression Analysis was used to predict the correlation of the dependent variable (job satisfaction) with corporate entrepreneurship, market orientation and flexibility as the independent variables, as set out in Tables 3 and 4.

Table 3

Results of Multiple Regression Analysis with extrinsic job satisfaction as the dependent variable and the psychometric sub-scales as the independent variables

Variable	F(df)	P	R ²	C(p)
CE4	195.67 (1 ; 332)	0.0001	0.3715	99.4417
CE3	35.54 (2 ; 331)	0.0001	0.4326	59.7840
CE2	25.50 (3 ; 330)	0.0001	0.4734	33.9601
F2	11.17 (4 ; 229)	0.0009	0.4908	24.1390
F1	11.36 (5 ; 228)	0.0008	0.5079	14.4794
CE5	4.34 (6 ; 227)	0.0379	0.5144	12.0688
CE1	4.57 (7 ; 226)	0.0334	0.5211	9.4824

Table 2 indicates extrinsic job satisfaction as the dependent variable with a common variance of 52.11 per cent with the predictor variables, with seven of the sub-scales entering the prediction. The corporate entrepreneurship variable of

rewards/reinforcement explained the largest part of the prediction (37.15 per cent), with the remaining six variables significantly contributing 14.96 per cent of the total prediction of 52.11 per cent at a 95 per cent level of confidence.

Table 4

Multiple Regression Analysis with intrinsic job satisfaction as the dependent variable and the psychometric sub-scales as the independent variables

Variable	F(df)	p	R ²	C(p)
CE4	82.78 (1 ; 332)	0.0001	0.2001	40.6938
CE3	20.76 (2 ; 331)	0.0001	0.2474	20.8144
CE2	10.10 (3 ; 330)	0.0016	0.2698	12.4574
F1	5.52 (4 ; 229)	0.0194	0.2819	8.8684
CE5	4.08 (5 ; 228)	0.0442	0.2908	6.7786

Table 3 indicates that with intrinsic job satisfaction as the dependent variable, five of the sub-scales entered the prediction, with a total prediction of 29.08 per cent of the variance in the dependent variable, at a 95 per cent level of confidence. Rewards/reinforcement formed a variance of 20.01 per cent in the dependent variable.

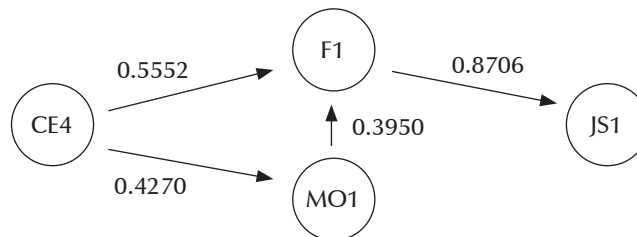
The results of the Intercorrelations, Multiple Regressions and theoretical foundations in the literature were used to investigate the prediction

of the job satisfaction total further by means of Structural Equations Modelling (SEM). Due to different positive and negative inter-correlations between the psychometric sub-scales and the extrinsic and intrinsic job satisfaction sub-scales, four separate SEM models were built with the job satisfaction sub-scales as the outcome variables.

Model 1 investigates the relationships between CE4, F1, MO1 and JS1 (extrinsic) as the end variable, as illustrated in Figure 2.

Figure 2

Structural Equations Model 1 with extrinsic job satisfaction as the outcome variable



Source: Own compilation

All the path coefficients in Figure 2 are satisfactory (>0.3). Confirmatory Factor Analysis on this empirically derived model is shown in Table 5.

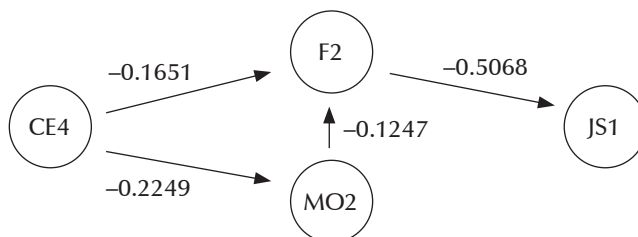
The goodness-of-fit index indicates a good fit with the data, interpreted according to indications by Hoyle (1995) and Hair, Anderson, Tatham and Black (1998) with a high level of parsimony.

Table 5
Indices obtained from the Structural Equations Analysis of Model 1

Indices	Value
Goodness of Fit Index (GFI)	0.9310
GFI Adjusted for Degrees of Freedom (AGFI)	0.8850
Root Mean Square Residual (RMR)	0.0666
Chi-square (df = 33, p > Chi-square > 0.0001)	122.3938
RMSEA Estimate (90% CI = 0.0735 to 0.1077)	0.0903
Bentler & Bonett's (1980) NFI	0.8981

The second Structural Equations Model investigates the prediction of JS2 (extrinsic job satisfaction) by means of the inter-relationships between CE4, F2 and MO2, as shown in Figure 3.

Figure 3
Structural Equations Model 2 with extrinsic job satisfaction as the outcome variable



Source: Own compilation

Figure 3 indicates only the path coefficients between F2 authoritarianism and JS1 (extrinsic) as satisfactory (above 0.30). The strength of the relationships between these variables was investigated further by means of Confirmatory Factor Analysis, as reported in Table 6.

Table 6
Indices obtained from the Structural Equations Analysis of Model 2

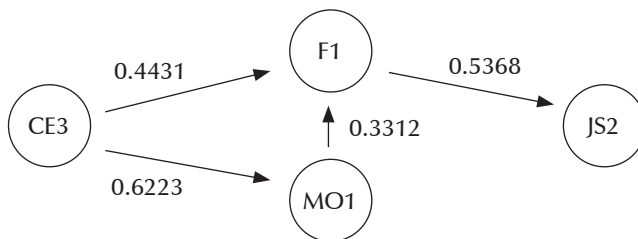
Indices	Value
Goodness of Fit Index (GFI)	0.9056
GFI Adjusted for Degrees of Freedom (AGFI)	0.8516
Root Mean Square Residual (RMR)	0.1738
Chi-square (df = 42, p > Chi-square > 0.0001)	235.1057
RMSEA Estimate (90% CI = 0.1033 to 0.1326)	0.1177
Bentler's Comparative Fit Index	0.8419
Bentler & Bonett's (1980) NFI	0.8159

Table 6 indicates a reasonable fit between the data and the model (Hoyle, 1995; Hair *et al.*, 1998), with a GFI of 0.91 and an RMR of 0.17. The fact

that the relationships of several path coefficients are smaller than 0.3 is an indication that the model does not represent the data very well.

Model 3 is a Structural Equation investigation of the relationships of JS2 (intrinsic) as the end variable and CE3, MO1 and F1 as the predictor variables, as shown in Figure 4.

Figure 4
Structural Equations Model 3 with intrinsic job satisfaction as the outcome variable



Source: Own compilation

All the path coefficients in Figure 4 are satisfactory (>0.3). Confirmatory Factor Analysis for further empirical investigation is shown in Table 7.

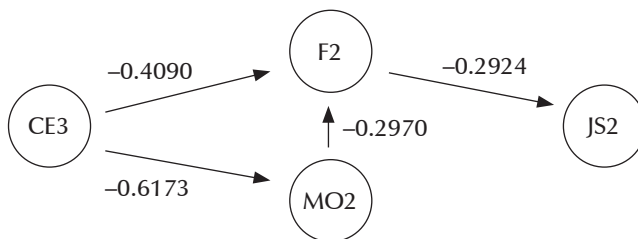
Table 7
Indices obtained from the Structural Equations Analysis of Model 3

Indices	Value
Goodness of Fit Index (GFI)	0.9586
GFI Adjusted for Degrees of Freedom (AGFI)	0.9256
Root Mean Square Residual (RMR)	0.0971
Chi-square (df = 25, p > Chi-square > 0.0001)	66.4936
Independence Model Chi-square (df = 36)	1005.1
RMSEA Estimate (90% CI = 0.0504 to 0.0916)	0.0707
Bentler's Comparative Fit Index	0.9572
Bentler & Bonett's (1980) NFI	0.9338

Table 7 indicates a good fit with the data (Hoyle, 1995; Hair *et al.* 1998), supported by the satisfactory path coefficients shown in Figure 4.

Model 4 (see Figure 5) illustrates the Structural Equations Model investigation of JS2 (intrinsic) as the predictor variable, with CE3, F2 and MO2 as the independent variables.

Figure 5
Structural Equations Model 4 with intrinsic job satisfaction as the outcome variable



Source: Own compilation

All the path coefficients in Figure 5 are at an acceptable level. A further empirical investigation was done by means of Confirmatory Factor Analysis, as shown in Table 8.

Table 8
Indices obtained from the Structural Equations Analysis of Model 4

Indices	Value
Goodness of Fit Index (GFI)	0.9380
GFI Adjusted for Degrees of Freedom (AGFI)	0.8966
Root Mean Square Residual (RMR)	0.1294
Chi-square (df = 33, $p > \text{Chi-square} > 0.0001$)	127.5724
RMSEA Estimate (90% CI = 0.0762 to 0.1102)	0.0929
Bentler's Comparative Fit Index	0.9111
Bentler & Bonett's (1980) NFI	0.8849

The indices in Table 8 indicate a good fit between the data and Model 4 (GFI = 0.94), supportive of the acceptable path coefficients.

10 Discussion

An emergent body of literature seeks to identify organisational conditions required for intrapreneurship to occur, confirming that continuous innovation has to take place to remain vigorously competitive (Herbert & Brazeal, 1998; Kemelgor, 2002; Nayager & Van Vuuren, 2005) and growth-oriented (Covin & Miles, 1999; Goosen, De Coning & Smit, 2002; Hornsby, Kuratko & Zahra, 2002). This study confirms the body of knowledge by identifying a set of constructs of entrepreneurial activities that leads to job satisfaction and competitive advantages to businesses (Katz, 1993; Nayager & Van Vuuren, 2005; Rutherford & Holt, 2007; Van Wyk, 1998; Weaver & Franz, 1992). For this reason, it is important that management's support for entrepreneurial activities becomes visible and that organisations' human resources management policies and reward systems manifestly support these activities, such as corporate entrepreneurship, market orientation and organisational flexibility, as confirmed in the current study.

The importance of job satisfaction in the work environment is emphasised by Knoop (1995),

Luthans (1998) and Robbins (2001). This study contributes to the body of knowledge regarding job satisfaction in a corporate entrepreneurial culture with healthy flexibility and market orientation. As far as could be established, a prediction of intrinsic and extrinsic job satisfaction was done in this study for the first time using corporate entrepreneurship, market orientation and flexibility as the predictor variables in the form of Multiple Regression Analysis and SEM.

In Figures 2 to 5, only Figure 3 showed some weak path coefficients, suggesting significant causal links, as discussed. These models illustrated the significant positive prediction of extrinsic and intrinsic job satisfaction by establishing corporate entrepreneurial rewards, intelligent generation market orientation, and formality flexibility orientation as predictors. Negative influences are indicated in Figures 3 and 5, with extrinsic and intrinsic job satisfaction as the dependent variables and corporate entrepreneurial work improvement, an inertia-oriented market orientation and authoritarianism (in terms of the flexibility orientation) as the independent variables.

The findings of the current study confirm that there is a significant relationship between innovativeness at the entrepreneurial level and market orientation and flexibility of an organisation, as suggested by Barrett and Weinstein (1998), and intrinsic and extrinsic

job satisfaction. The impact appears to be significant.

The significant relationship between corporate entrepreneurship and job satisfaction as reported in previous studies (Katz, 1993; Rutherford & Holt, 2007; Van Wyk, 1998; Weaver & Franz, 1992) is confirmed in the current study. Simultaneously, the significant positive relationship between market orientation and job satisfaction of previous studies (Barrett & Weinstein, 1998; Farrell, 2005; Liu, Luo & Shi, 2002; Luo, Zhou & Liu, 2005; Matsuno, Mentzer & Özsoyner, 2002; Mengüç, 1996; Sigauw, Brown & Widing, 1994; Wood *et al.*, 2000) is confirmed in the current study. The many confirmed significant positive relationships between market orientation and job satisfaction, which only the Oleski (2000) study reported as insignificant, are an indication of the positive relationships that seem to exist in general. Findings in the current study also confirm the need for flexibility, for a realignment of organisations' resources to meet new demands (Bhardwaj & Momaya, 2007; Hatum & Pettigrew, 2006; Lansley, 1983; Volberda, 1999), and the combined influence of corporate entrepreneurship and market orientation on job satisfaction. This is a confirmation of the study of Oleski (2000) that flexibility does not influence job satisfaction directly, but that in combination with corporate entrepreneurship and market orientation, the significance of the relationship is established. This study also supports the argument of Bhardwaj and Momaya (2007) that the advancement of corporate entrepreneurship and flexibility can lead to strategies and competitive approaches in terms of new ventures, and technology, product and service development.

The current study indicates that market orientation does not seem to be directly related to job satisfaction, but seems to have an indirect relationship with it, in conjunction with corporate entrepreneurship and organisational flexibility. The significant paths between corporate entrepreneurship, market orientation and organisational flexibility in the prediction of job satisfaction imply the interrelatedness of the three concepts, as proposed in Figures 2 to 5.

11

Limitations of the current study

The following points can be seen as limitations of the current study:

- An obvious limitation of this study is the relatively few business sectors it covered. Ideally, more sectors (including the public sector) should be covered, and the results could then be compared across sectors to determine whether particular sectors are more likely to exhibit particular entrepreneurial patterns than others. Similarly, this study could have looked at other factors (for example, firm size) as the predictive variables. The life insurance company was over-represented in comparison with the other sectors in the study.
- The low percentage of respondents from an African background limits the generalisability of the findings in respect of individuals with an African home language, mother tongue and heritage.
- The South African context of the study limits the generalisability of the findings.
- The method used in the current study was strictly paper-and-pencil questionnaires, which could have led to mono-method bias in the responses that were gathered.

12

Managerial implications

The results indicate that healthy corporate entrepreneurial, market and flexibility orientations in respect of rewards, intelligence generation and formality (flexibility 1) support both the intrinsic and extrinsic job satisfaction of individuals. At the same time, intrinsic and extrinsic job satisfaction can be hampered by a marketing orientation of inertia and an authoritarian orientation with regard to flexibility. This should serve as a warning to management. For this reason, it is important that healthy corporate entrepreneurial, market orientation and flexibility cultures are formed by the executives in organisations.

The positive and negative paths indicated by the Structural Equation Models should be incorporated in managerial decisions, serving as both a challenge and a warning that certain corporate entrepreneurial, flexibility and market orientations could enhance or restrict job satisfaction.

It is important that South African organisations upgrade their innovative prowess, by developing healthy corporate entrepreneurial, flexibility and market orientation strategies, thereby creating healthy cultures in terms of job satisfaction.

13

Directions for future research

Future research should be directed at both the creation and advancement of job satisfaction by means of other factors that could also be related to healthy corporate entrepreneurial, market and flexibility cultures, especially in South Africa as a developing country.

Future studies should investigate the measured variables in countries other than South Africa and a wider range of business sectors.

Future research should also explore the influence of corporate entrepreneurship, organisational flexibility and market orientation on a firm's performance. An assessment of how corporate entrepreneurship activities, organisational flexibility and market orientation contribute toward productivity, as well as the financial success of a company, is imperative.

The relatively high representation of mainly South African life insurance companies limits the generalisability of the findings of the current study to other organisations and countries. This study should be replicated in other economic sectors representing a wider South African cultural base to include more people from an African background.

To summarise, this study provides empirical evidence regarding a relationship between organisational factors such as corporate entrepreneurship, flexibility and market orientation, which are believed to enhance or diminish job satisfaction in South African organisations. It is particularly important to note that inertia (in the marketing orientation)

and authoritarianism (in terms of flexibility) as variables appear to have the potential to thwart job satisfaction in organisations, notwithstanding rewards and reinforcement. Alternatively formality (flexibility factor 1) and intelligence generation in conjunction with rewards and reinforcement enhance job satisfaction. Finally, this study has highlighted the importance of corporate entrepreneurship, flexibility and marketing orientations for the job satisfaction of individuals in organisations. If organisations capitalise on these aspects, it can lead to a competitive advantage and positive returns. It is hoped that the findings will inspire further research in the relationship between corporate entrepreneurship, flexibility and market orientations, especially in South Africa as a developing country.

14

Concluding remarks

Every organisation strives to have employees who are satisfied with their job, due to the advantages such job satisfaction holds in terms of a positive organisational climate, leading to a competitive advantage. The findings have shown how sensitive employees' job satisfaction can be to both positive and negative influences from certain corporate entrepreneurship, market orientation and flexibility variables.

The findings clearly suggest that management should address, promote and monitor certain corporate entrepreneurship, market orientation and flexibility activities in an organisation, eventually creating a business with employees who are satisfied in their jobs. Managements should therefore align themselves towards the promotion of corporate entrepreneurship activities in organisations by being receptive to, and by encouraging and rewarding innovative suggestions from employees. Corporate entrepreneurship initiatives should be guided by providing structured channels and a homogeneous management style, based on refined control mechanisms. A further warning is that any such well-intended procedures can be nullified by an authoritarian management style.

There seems to be a fine balance between the different factors leading to individuals' experiencing job satisfaction, and it is well worth supervising these factors in a sensitive and sophisticated manner.

References

- 1 BARRETT, H. & WEINSTEIN, A. (1998) "The effect of market orientation and organisational flexibility on corporate entrepreneurship", *Entrepreneurship: Theory and Practice*, 23(1): 57-67.
- 2 BARRINGER, M.S. & BLUEDORN, A.G. (1999) "The relationship between corporate entrepreneurship and strategic management", *Strategic Management Journal*, 20: 421-444.
- 3 BHARDWAJ, B.R. & MOMAYA, K. (2007) "Role of organizational flexibility for corporate entrepreneurship: Case study of FedEx Corporation", *Global Journal of Flexible Systems Management*, 7(1/2): 37-44.
- 4 BHARDWAJ, B.R.; CAMILLUS, J.C. & HOUNSHELL, D.A. (2006) "Continual corporate entrepreneurial search for long-term growth", *Management Science*, 52(2): 248-261.
- 5 BHARDWAJ, B.R.; SUSHIL, S. & MOMAYA, K. (2007) "Corporate entrepreneurship model: a source of competitiveness", *IIMB Management Review*, 19(2): 131-145.
- 6 COVIN, J.G. & MILES, M.P. (1999) "Corporate entrepreneurship and the pursuit of competitive advantage", *Entrepreneurship Theory Practice*, 23(3): 47-64.
- 7 DAWIS, R.V.; LOFQUIST, L.H. & WEISS, D.J. (1968) "A theory of work adjustment: A revision", *Minnesota Studies in Vocational Rehabilitation*, 23: 15-25.
- 8 ELLIS, R.J. & TAYLOR, N. (1987) "Specifying entrepreneurship", in: *Frontiers of Entrepreneurship Research*, Proceedings of the Seventh Annual Babson College Entrepreneurship Research Conference. Babson College: Wesley, Massachusetts: 527-542.
- 9 ESTEBAN, Á.; MILLÁN, Á.; MOLINA, A & MARTIN-CONSUEGRA, D. (2002) "Market orientation in service. A review and analysis", *European Journal of Marketing*, 36(9/10): 1003-1021.
- 10 FARRELL, M.A. (2005) "The effect of a market-oriented organisational culture on sales-force behaviour and attitudes", *Journal of Strategic Marketing*, 13(4): 261-273.
- 11 FOUNTAIN, P.D. (1999) "Moderating effects of vertical exchange relationship on the relationship between firm market orientation and selected salesperson role variables", *Dissertation Abstracts International Section A: Humanities & Social Sciences*, 60(6-A): 21-31.
- 12 GOOSEN, C.J.; DE CONING, T.J. & SMIT, E.V.D.M. (2002) "The development of a factor based instrument to measure corporate entrepreneurship: A South African perspective", *South African Journal of Business Management*, 33(3): 39-51.
- 13 GREWAL, R., & TANSUHAJ, P. (2001) "Building organizational capabilities for managing economic crisis: The role of market orientation and strategic flexibility", *Journal of Marketing*, 65, 67-80.
- 14 HAIR, J.R., JR.; ANDERSON, R.E.; TATHAM, R.L. & BLACK, W.C. (1998) *Multivariate Data Analysis*, Macmillan: New York.
- 15 HATUM, A. & PETTIGREW, A.M. (2006) "Determinants of organizational flexibility: a study in an emerging economy", *British Journal of Management*, 17(2): 115-137.
- 16 HERBERT, T.T. & BRAZEAL, D.V. (1998) "The future corporation: corporate entrepreneurship on the fly", <http://www.saber.uca.edu/docs/proceedingdII>. (Accessed 25 June 2001.)
- 17 HORNSBY, J. S.; KURATKO, R.V. & MONTAGNO, D. F. (1999) "Perception of internal factors for corporate entrepreneurship: A comparison of Canadian and U.S Managers", *Entrepreneurship Theory and Practice*, 24(2): 9-28.
- 18 HORNSBY, J.S.; KURATKO, R.V. & ZAHRA, S.A. (2002) "Middle managers' perception of the internal environment for corporate entrepreneurship: Assessing a measurement scale", *Journal of Business Venturing*, 17(3): 253-273.
- 19 HOYLE, R.H. (1995) *Structural Equation Modelling: Concepts, Issues, and Applications*, Sage: Thousand Oaks, California.
- 20 JABLECKA, J. (2001) "Entrepreneurship, innovation, and quality: The successful strategy of a newly established institution: The example of Wyższa Szkoła Biznesu-National Louis University in Nowy Sącz", *Higher Education in Europe*, 26(3): 367-379.
- 21 KATZ, J. (1993) "How satisfied are the self-employed: A secondary analysis approach", *Entrepreneurship Theory and Practice*, 17(3): 35-51.
- 22 KEMELGOR, B.H. (2002) "A comparative analysis of corporate entrepreneurial orientation between selected firms in the Netherlands and the USA", *Entrepreneurship & Regional Development*, 14(1): 67-87.

- 23 KERLINGER, F.N. & LEE, H.B. (2000) *Foundations of Behavioural research*. (4th ed.) Harcourt College Publishers: Sydney.
- 24 KNOOP, R. (1995) "Relationships among job involvement, job satisfaction, and organizational commitment for nurses", *The Journal of Psychology*, 129(6): 643-649.
- 25 KOHLI, A.K. & JAWORSKI, B.J. (1990) "Market orientation: The construct, research propositions, and managerial implications", *Journal of Marketing*, 54(2): 1-18.
- 26 KOHLI, A.K.; JAWORSKI, B.J., & KUMAR, A. (1993) "Markor: A measure of market orientation", *Journal of Marketing Research*, 30(4): 467-477.
- 27 KUKALIS, S. (1989) "The relationship among firm characteristics and design strategic planning in large organizations", *Journal of Management*, 54(4): 565-580.
- 28 KURATKO, D.F.; MONTAGNO, R.V., & HORNSBY, J.S. (1990) "Developing an intrapreneurial assessment instrument for an effective corporate entrepreneurial environment", *Strategic Management Journal*, 11(Special Issue): 49-58.
- 29 KWAKU, A. & KO, A. (2001) "An empirical investigation of the effect of market orientation and entrepreneurship orientation alignment on product innovation", *Organization Science*, 12(1): 54-74.
- 30 KWANDWALLA, P.N. (1987) "Generation of pioneering-innovative management: Some Indian evidence", *Organization Studies*, 8(1): 39-59.
- 31 LANSLEY, P. (1983) "A practical approach to auditing organizational flexibility", *Construction Management and Economics*, 1(2): 145-146.
- 32 LIU, S.S.; LUO, X., & SHI, Y. (2002) "Integrating customer orientation, corporate entrepreneurship, and learning orientation in organizations-in-transition: an empirical study", *International Journal of Research in Marketing*, 19(4): 367-382.
- 33 LOCKE, E.A. (1976) "What is job satisfaction?", *Organizational Behaviour and Human Performance*, 4: 309-336.
- 34 LONG, R.J. (2001) "Pay systems and organizational flexibility", *Canadian Journal of Administrative Sciences*, 18(1): 25-32.
- 35 LUO, X., ZHOU, L., & LIU, S.S. (2005) "Entrepreneurial firms in the context of China's transition economy: an integrative framework and empirical examination", *Journal of Business Research*, 58(3): 277-284.
- 36 LUTHANS, F. (1998) *Organizational Behaviour* (8th ed.) Irwin/McGraw-Hill: Singapore.
- 37 MATSUNO, K.; MENTZER, J.T. & ÖZSOMER, A. (2002) "The effects of entrepreneurial proclivity and market orientation on business performance", *Journal of Marketing*, 66(3): 18-33.
- 38 MCCORMICK, E.J. & ILLGEN, D. (1985) *Industrial and Organizational Psychology* (8th ed.) Allen & Unwin: London.
- 39 MENGÜÇ, B. (1996) "The influence of the market orientation of the firm on sales force behavior and attitudes: further empirical results", *Research in Marketing*, 13(3): 277-291.
- 40 MICHIE J. & PADAYACHEE, V. (1997) *The Political Economy of South Africa's Transition*, Dryden: New York.
- 41 NARVER, J.C. & SLATER, S.F. (1990) "The effect of market orientation on business profitability", *Journal of Marketing*, 54(4): 20-35.
- 42 NAYAGER, T. & VAN VUUREN, J.J. (2005) "An analysis of an organisational strategy, structure and culture that supports corporate entrepreneurship in established organisations", *South African Journal of Economic Management Sciences*, 8(1): 29-38.
- 43 OLESKI, D.R. (2000) "An exploration of the moderating effects of flexibility and activeness on correspondence and job satisfaction in the theory of work adjustment", *Dissertation Abstracts International: The Sciences & Engineering*, 61(2-B): 1121.
- 44 ROBBINS, S. (2001) *Organizational Behaviour*, Prentice-Hall: Upper Saddle River, New Jersey.
- 45 RUTHERFORD, M.W. & HOLT, D.T. (2007) "Corporate entrepreneurship. An empirical look at the innovativeness dimension and its antecedents", *Journal of Organizational Change Management*, 20(3): 429-446.
- 46 SHARMA, P. & CHRISMAN, J.J. 1999. "Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship", *Entrepreneurship, Theory and Practice*, 23(3): 11-28.
- 47 SIGAUW, J.A.; BROWN, G. & WIDING, R.E. (1994) "The influence of the market orientation of the firm on sales force behaviour and attitudes", *Journal of Marketing Research*, 31(1): 106-116.
- 48 SLATER, S.F. & NARVER, J.C. (1994) "Does competitive environment moderate the market orientation-performance relationship?" *Journal of Marketing*, 58(January): 46-55.
- 49 STOHR, E.A. & ZUR MEUHLN, M. (2007) "Business process management: Impact on organizational flexibility" *Call for Papers: Global Journal of Flexible Systems Management, Special Issue*. <http://www.bpm-research.com/forum/index.php?showtopic=666>. (Accessed 14 May 2008.)

- 50 STRATEMEYER, A.W. (2002) "The relationship of rewards, professionalism, market orientation, job satisfaction and service quality among professional service providers: The case of college professors", *Dissertation Abstracts International: Humanities & Social Sciences*, 62(12-A): 4254.
- 51 VAN WYK, R. (1998) "Type A behaviour pattern in professionals", unpublished doctoral thesis, University of Pretoria: Pretoria.
- 52 VOLBERDA, H.W. (1999) *Building the Flexible Firm*, Oxford University Press: Oxford.
- 53 WARD, S. GIRARDI, A. & LEWANDOWSKA, A. (2006) "A cross-national validation of the Narver and Slater Market Orientation Scale", *Journal of Marketing Theory and Practice*, 14(2): 155-167.
- 54 WEAVER, C.N. & FRANZ, R. (1992) "Work-related attitudes of entrepreneurs, public, and private employees", *Psychological Reports*, 70: 387-390.
- 55 WEISS, D.J.; DAWIS, R.V.; ENGLAND, G.P. & LOFQUIST, L.H. (1967) *Manual for the Minnesota Satisfaction Questionnaire*, University of Minnesota, Industrial Relations Center: St. Paul, Minnesota.
- 56 WOOD, R., BHUAIN, S.N. & KIECKER, P. (2000) "Market orientation and organizational performance in not-for-profit hospitals", *Journal of Business Research*, 48(3): 213-226.
- 57 ZAHRA, S. (1991) "Predictors and financial outcomes of corporate entrepreneurship: An explorative study", *Journal of Business Venturing*, 6: 259-285.