The Impact of Skills-Development Training on Lower-Level Employee's Motivation and Job Satisfaction – A Case-Study of Five South African Companies

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Abstract

Empirical findings of the impact of training on employee motivation and job satisfaction are reported. One of the major debilitating effects of the legacy of apartheid is a high level of illiteracy in the South African population. Encouraging the corporate sector through levies to promote skills development, seems to have been received with mixed feelings. In this regard, the impact of training on the motivation level and job satisfaction of randomly sampled employees of five companies in two South African provinces is reported on. A longitudinal study, with a pre- and post-quasi experimental research design, was adopted to achieve the goal of the study - using a Job Description Index (JDI) measuring instrument to collect data from the respondents. There was a significant correlation between job satisfaction and effectiveness of training transfer - i.e. those employees who received more training were more motivated than those who received less training or no training at all. It is concluded that managers need to appreciate and ensure that the effectiveness of skills transfer is a critical determinant, that must illuminate the underlying challenges of achieving bottom-line targets.

Keywords: *employee motivation, skills transfer, moderating effect, job satisfaction, lower-level employees.*

1. Introduction

The importance of Human Resource Development (HRD) as a means of ensuring that organisations maintain their competitiveness in an ever-changing environment, has never been so important. Griesel (2004:95) remarked that it makes no sense to spend time, money and human resources (HR) on the appointment of the right people in the right positions, and then to ultimately relinquish such staff to other organisations because they are not being looked after. Organisations should make it possible for employees to attain their own objectives, whilst achieving the objectives of the organisation (Marx, 1993:365). Success for most organisations depends on finding the employees with the skills to successfully perform the tasks required to achieve the company's strategic goals (Robbins & De Cenzo, 2001:184). To improve performance, an organisation or a manager will have to identify two categories of people; first, those whose motivation is satisfactory, but whose skill or ability needs developing, and second, those whose ability and skill levels are satisfactory, but who lack motivation. It is the motivational problem that is likely to be the more difficult to deal with. After all, the quality of an organisation is, to a large degree, determined by the quality of people it employs.

The assertion "get real and train people to achieve" (Van Hoek & Black, 2002:2) is indicative not only of past history, but also of the challenges faced by the captains of South African industries in alleviating the alarming skills shortage in their companies and the country. Needless to say, illiteracy does not promote productivity (Cronje, du Toit, Mol, Van Reenen & Motlatla, 1997:442). Van Rensburg (2004) contends that business organisations today are striving to become world-class organisations and to compete globally (El Toukhy, 1998; Ensor, 1997; Hough & Neuland, 2001). For an organisation to become a world-class organisation, it needs committed employees (Mayfield & Mayfield, 2002; Roodt, 2004; Rosen, 1992). For companies to be competitive and to remain so, they need to ensure that all workers are happy, and that these workers feel valued as part of the organisation, because business productivity is dependent on employee job satisfaction (Chiu, 2000; Christen, Lyer & Soberman, 2006). The critical role that a motivated, skilled and knowledgeable workforce can play in securing competitive advantages, in both local and international markets, can never be over-emphasised. For a long time "organisations in South Africa have neglected to invest in their employees to equip them with the necessary skills for the challenges of our modern, globally competitive world" (Swanepoel, 2000:493). Membathisi Mdladlane, asserted that South Africa was part of the global economy, and needed to increase skills in order to improve the productivity and competitiveness of the country's industry, business and commercial sector (Van Hoek & Black, 2002:2).

Given this background, the impact that skills development is likely to have on the motivation level of lower-level employees in companies, is investigated. There is a perception that most companies focus investment on training and development mainly on the middle to top management, and rarely on lower-level employees. Such employees have low wages and few opportunities to significantly increase their pay in either current jobs or through promotions (Robbins, 1998:225). Research has shown that motivation is one of the vital factors of work performance (Yu, Yu & Yen, 2009; Chiu, 2000; Bull, 2005; Christen, Lyer & Soberman, 2006).

2. Motivation in Perspective

Job satisfaction is a complex phenomenon that has been widely researched (Li-Ping Tang & Talpade, 1999; Matloga, 2005:14). Yousef (2000) ascribes this to the fact that job satisfaction has significant associations with several variables. It is evident from various literature sources that job satisfaction goes hand-in-hand with motivation, the only difference being in the causes and effects (Matloga, 2005). In this paper, the two concepts are used interchangeably. Workplace motivation is what makes people work or is the reason people want to work. It is the 'internal drive' that encourages people to achieve a particular goal (Cronje, Du Toit, Marais & Motlatla, 2006:222; Robbins, 1998). Cronje *et al*. (2006) further posit that to be successful in any organisation, employees and managers should understand what causes different motivational levels, because the achievement of both personal and organisational goals is important. It is, however, of critical importance to note that without a well-trained and motivated workforce, organisations cannot be successful. Getting the best out of employees is currently a daunting task for organizations, as most ponder how to ensure improved performance from employees. Coldwell (1997:25) reports that ability (Tosi, Rizzo & Carroll, 1994) and motivation (Herzberg, Mausner & Snyderman, 1959) are both important independent variables, in the explanation of individual work performance.

Various theories of motivation propose a set of motivational sources, differing in respect of the degree to which they theorise a dominant source of motivation (De Klerk, 2001:83). These theories include the content theories (for example, Maslow's Need Hierarchy, Herzberg's Two Factor Theory and McClelland's Achievement Theory), the process theories (for example, Vroom's Expectancy Theory, Porter and Lawler's Expectancy Theory, and Adam's Equity Theory), and the reinforcement theory based on the Thorndike principle of the law of effect. The latter principle simply refers to the fact that people tend to repeat behaviour that leads to a pleasant outcome.

2.1 The role of training transfer in work motivation and individual performance

Training and development is seen as a key factor in making it possible for an organisation to achieve its strategic, business and operational goals (Carrell, Elbert, Hatfield, Grobler, Marx & van der Schyff, 2000:308), and therefore training outputs should emphasise performance (Yamnill & McClean, 2001). Additionally, Nel (2001:467) describes training as a learning experience aimed at bringing about a relatively permanent change in an individual, which will heighten the individual's ability to do the job. Furthermore, Dransfield, Howkins, Hudson and Davies (1996:55) insist that training fills the gap created between that which a person is able to do at a specific moment in time, and what he/she is able to do after applicable training has been givenIndividuals rely on some training to improve their current skills and to learn new skills (Mathieu, Tannenbaum & Salas, 1992:828). Training represents an expensive investment that organisations make in their human resources, and therefore it is important that organisations evaluate the effectiveness of their training efforts (Cascio, 1989), in order to maximise the benefits of such training. Training must become more intimately involved with every developmental aspect of both the individual and the organisation. Training can be used to prepare employees to meet the challenges and changes in the workplace, and to upgrade and refine their skills (Struwig & Smith, 2000:114). If South Africa wants to succeed in the new environment, it will have to start by building its competency base (Grobler et al., 2002).

Price (2000:334) asserts that because of organisational change, the traditional role of training has become obsolete. Morgeson, Delaney-Klinger & Hemingway (2005) and Chiou, Lee and Purnomo (2010), indicate that successful organisational work-design initiatives must overcome many obstacles in order to have their intended impact and influences on multiple outcomes, such as expected to increase positive behavioural (e.g. job performance) and attitudinal (e.g. job satisfaction) outcomes (Humphrey, Nahrgang & Morgeson, 2007). The basic principle of the motivational approach, is that jobs will be enriched (i.e. made more motivating and satisfying) if high levels of these characteristics are present (Morgeson & Humphrey, 2006). Researchers have also maintained that training efforts are unlikely to result in positive changes in job performance, unless the newly-trained competencies are transferred to the work environment (Baldwin & Ford, 1988; Montesino, 2002).

Holton (1996) proposed a conceptual evaluation model of training, focused on individual performance. This model proposes three primary outcomes of training intervention: learning, individual performance, and organisational results. These outcomes are defined, respectively, as achievement of the learning outcome desired in an HRD intervention, change in individual performance as a result of learning being applied on the job, and results at the organisational level because of change in individual performance. Regarding job satisfaction, Faerman and Ban (1993) have found a moderate to strong relationship between training participants' satisfaction with the training and changes their work-related behaviour. Transfer of training is a core issue in linking individual change to the requirements of the organisational system. Therefore, if we believe that training truly makes a difference in organisational and individual performance, we must understand how to support transfer of training in organisations (Yamnill & McClean, 2001). It is vital to strike a balance between management needs or expectations, and those of employees. George and Jones (2002:186) indicate that management, on the one hand, wants workers to be motivated in order to contribute inputs (effort, specific job behaviours, skills, knowledge, time, and experience) because inputs influence job performance and, ultimately, organisational performance. On the other hand, workers are concerned with obtaining outcomes from the organisation, namely extrinsic outcomes (for example, pay and job security) and intrinsic outcomes (for example, a feeling of accomplishment from doing a good job or the pleasure of doing interesting work). These key concerns of management and workers are at the heart of motivation.

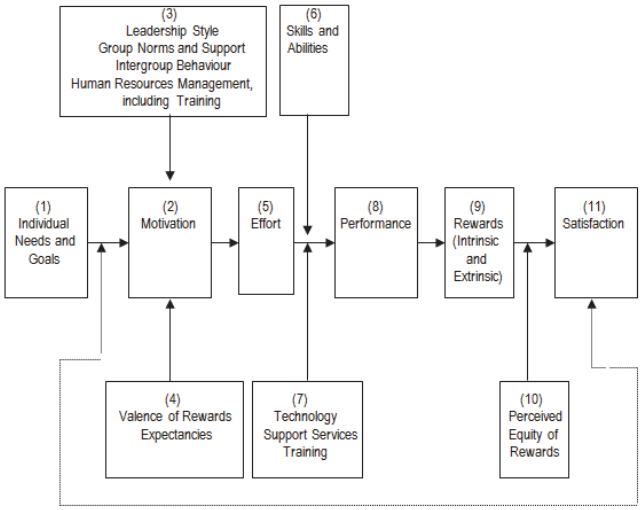
2.2 Justification of the core hypothesis through the Expectancy Theory

Vroom's (1964) Expectancy Theory was used to measure employee work motivation and performance in this study. The reason for selecting this measurement of work motivation, is mainly postulated under a 'valence-instrumentality-expectancy framework'. When an employee starts work at an organisation, he/she has certain expectations of his/her role there. Equally, management requires an individual to fulfil a certain role within the organisation, and expects a person who is able and willing to do the designated job and work the required hours. These expectations are known formally as a psychological contract (Whittington-Jones, 2005:24).

The underlying hypothesis advanced in this paper, is that with the necessary and relevant skills-development training (i.e. positive valence), the individual will be motivated to increase his/her performance (i.e. effort), only if this ensures/affords (i.e. instrumentality) him/her the rewards (i.e. expectancy) attendant with increased performance as a result of skills development. The emphasis is on effort (E – P) and performance relationship, i.e. by improving the relationship between effort and performance through training, employee motivation is likely to improve reciprocally. The fundamental hypothesis is that training can enhance the effort and ability of an individual to perform. If effort is to lead to good performance, the individual should have the requisite ability to perform. This choice is based on the assumption that seeks to examine the "trainee's perception that doing well in a program would lead to better job performance and consequently to desirable and valued outcomes". This approach is particularly useful, because it permits the integration of both individual and situational variables, as they relate to a trainee's perceptions of various valence-instrumentality-expectancy components (Farr & Middlebrooks, 1990).

Several recent training-effectiveness studies have been conducted within the general framework of valence-instrumentality-expectancy theory (Vroom, 1964). Noe (1986) submits that trainees will be more motivated to perform well in training, if they perceive that: (1) intensive effort will lead to high performance in training; (2) high performance in training will lead to high job performance; and (3) high job performance is instrumental in obtaining the desired outcomes and avoiding undesirable ones. It also follows that trainees will be motivated to do well if they perceive that performance in training will help them obtain outcomes not directly tied to their current positions, such as career development opportunities (Mathieu *et al*., 1992:829). Other prior research has found support for the influence of several individual variables on valence-instrumentality-expectancy cognitions. For example, Lawler and Suttle (1973) obtained significant correlations between individual role perceptions and ability measures, and various valence-instrumentality-expectancy components and composites. Furthermore, James, Hartman, Stebbins and Jones (1977) found support for the influence of several dimensions of psychological climate on instrumentality and valence ratings and, to a lesser degree, expectancy ratings. In a simulated organisational study, Jorgenson, Dunnette, and Pritchard (1973) found a significant correlation between manipulated effort-outcome probabilities and subjects' instrumentality ratings. Pritchard, DeLeo and Von Bergen (1976) manipulated behaviour-reward contingencies in a series of field experiments. Figure 1 (below) depicts an inherent relationship between motivation, performance and satisfaction, as suggested by empirical job satisfaction research and the theories of individual motivation.

Figure 1: The motivation-performance-satisfaction relationship



Adapted from French (1994:112).

2.3 Elucidating Figure 1 (from left to right, numbers refer to boxes)

Individual needs and goals (1) are fundamental driving forces in motivation. The extent and direction of an individual's motivation (2), is influenced by factors in the organisational environment such as leadership style, group norms and support, intergroup behaviour and HR policies and practices (3). Individual motivation is further influenced by the desirability of the rewards (valence) and by the expectancy that effort will lead to performance that will produce the desired outcomes (4). The effort expended (5), coupled with the skills and abilities (6), results in performance (8). However, the technology used, the support services provided, and the training given the person (7), are also factors in the level of performance. Performance leads to both intrinsic and an extrinsic rewards (9). Intrinsic rewards are internal reinforcements such as feelings of accomplishment and self-worth, whereas extrinsic rewards are external reinforcements such as pay, recognition, or promotion. Job satisfaction (11) stems from performance and the accompanying rewards, but is influenced by the extent to which the individual perceives the rewards as equitable (10). An arrow is drawn from 11 back to 1 and 2, because job satisfaction or dissatisfaction affects need fulfillment, future goals, and ongoing motivation.

3. Methodology

3.1 The research design

A survey design was adopted, and specifically the quasi-experimental research comparable pre-test post-test one group design, was used to carry out the objectives and to test the study's hypothesis (Cooper & Schindler, 2001:405; Baard, 2003:203). A non-probability sampling technique, namely stratified random sampling, was used to solicit responses from respondents. In the research design, there is a measurement of a dependent variable, namely individual motivation, when no independent variable (pre-training) is present, and subsequently an independent variable is introduced, namely training, followed by a repeated measurement of the dependent variable at a later stage, i.e. post-training (De Vos, Strydom, Fouche & Delport, 2005:144). The study is longitudinal, spanning eighteen months to two years. Measures of the dependent variable (individual motivation) are compared for two different states of the independent variable within the same group (before and after training).

In experimental research, quantitative research designs are used to determine aggregate differences between groups or classes of subjects. Emphasis is placed on precise measurement and controlling for extraneous sources of error (Rudestam & Newton, 2001:28). The purpose is to isolate a variable of interest (independent variable is individual motivation and to manipulate it through training to observe the impact of the manipulation on a second, or dependent

variable (i.e. individual performance)).

3.2 Population and sampling size

The target sample population consisted of randomly selected lower-level employees from five (5) companies in two provinces of South Africa: Free State and Northern Cape. There was specific reference to employees doing automatic (semi-skilled) and routine (skilled workers and supervisory management). This classification is derived from Paterson's (1972) Decision Band Job Grading Model. According to this model, this category of workers belongs to grades 'A', 'B1' and 'B', and does not necessarily take cognisance of performance management in daily routine jobs (Williams, 2000:27), unlike other workers in the higher echelon of the management hierarchy.

4. Data Collection

The original measuring instrument - the Job Description Index (JDI) - was used to collect data from 1000 respondents from five different companies, and data were both causal and longitudinal, because the required data were collected *before* and *after* spanning over a period of 24 months. A survey research method in a form of "explanatory surveys - a form of causal-comparative research" allowed the researcher to "explain the attitudes and behaviour of the respondents on the basis of data gathered at a point in time" (Ary, Jacobs & Razavieh, 2002:406). Face-to-face self-completion questionnaire interviews were administered to the randomly-selected respondents, to ensure: (i) greater completion rates; (ii) control over order of questions; (iii) gathering of information from people who cannot read or write; and (iv) the guarantee of confidentiality.

4.1 Data presentation and analysis

Presentation of the collected data was done using both inferential and descriptive statistics, using the computer software package, Statistical Package for the Social Sciences (SPSS, 2003). Cronbach alpha coefficients (a), and inter-item correlation coefficients, were used to determine the internal consistency (reliability) of the measuring instruments, and descriptive statistics were used to analyse data. Pearson correlations were used to assess the extent to which one variable is related to another. The Kolmogorov Smirnov Tests of normality were applied to decide whether the appropriate test should be parametric or non-parametric. Based on the results, the appropriate parametric statistical procedures (Independent T-Tests) or appropriate non-parametric procedures (the Mann Whitney U Tests) were applied, or in some cases both were applied.

4.2 Measuring instrument

The measuring instrument tests deal with perceived employee motivation level and job satisfaction, which consists of 33 sub-items from eight factors relating to dimensions originally identified by Herzberg (1966). These are: (1) work itself; (2) responsibility; (3) payment; (4) advancement; (5) growth; (6) recognition; (7) working conditions; and (8) leader/supervisor. These employee job-satisfaction dimensions are based on the Job Description Index (JDI) developed by Smith, Kendall & Hulin (1969), which contains 5 scales and 72 items. The five scales are designed to measure satisfaction in the following areas: (1) work on present job, e.g. fascinating; (2) present pay, e.g. income inadequate for normal expenses (-); (3) opportunities for promotion, e.g. good chance for promotion; (4) supervision on present job, e.g. lazy (-); and (5) people on present job, e.g. talk too much (-). The minus signs in parentheses indicate reversed items (i.e. those that show dissatisfaction). Numerous studies have assessed the validity of the JDI in different settings. Discriminant and convergent validity have been well substantiated, and reliability coefficients estimated by Smith *et al.* (1969) ranged from values of .80 to .88, for the five scales. Pincus (1986) reports a Cronbach alpha reliability score of .85 on his modified version of the JDI. Factor analysis was conducted, and used principal component extraction and varimax rotation in order to assess the discriminant and convergent validity of the measuring instrument. Cronbach Coefficient Alphas were computed for each of the employee response variables, in respect of the entire samples - for both data collection surveys.

4.3 Factoring

Factor rotation was used to enhance the significance and reliability of the factors (Hair *et al*., 1998). The purpose of

rotation was to obtain the best out of the relevant factors (Kerlinger & Lee, 2000). Thus, to obtain a factor matrix, the variables load as high as possible on a few factors, and have low loadings on other factors (Huysamen, 1980). The varimax technique was used in the extraction of the first level factors, in order to maximise explained variance.

Table 1: Reliability analysis of 'motivation and job satisfaction' measuring instrument

RELIABILITY ANALYSIS - SCALE (ALPHA) Item-total Statistics				
	Scale Mean if item deleted	Scale Variance if item deleted	Corrected Item- Total Correlation	Alpha if item deleted
B1M1	113.1111	274.8611	.7304	.9152
B1M2	113.4444	270.5278	.7986	.9140
B1M3	113.0000	285.0000	.3302	.9217
B1M4	112.6667	288.2500	.5310	.9185
B1M5	113.0000	293.0000	.3305	.9203
B1M6	112.8889	299.1111	.0976	.9221
B1M7	112.8889	284.6111	.4436	.9192
B1R1	113.2222	275.4444	.7784	.9148
B1R2	113.4444	278.0278	.5888	.9172
B1R3	113.0000	293.0000	.4820	.9194
B1P1	114.2222	281.4444	.5143	.9183
B1P2	114.2222	280.4444	.5426	.9178
B1P3	114.3333	286.7500	.2662	.9233
B1P4	114.7778	293.9444	.1984	.9222
B1P5	113.5556	282.5278	.6137	.9172
B1P6	114.2222	292.4444	.3777	.9199
B1A1	114.5556	277.0278	.6164	.9167
B1A2	114.6667	274.5000	.6951	.9156
B1A3	113.7778	274.4444	.5880	.9172
B1A4	113.7778	276.6944	.6494	.9163
B1G1	112.6667	289.5000	.4779	.9189
B1G2	112.7778	285.6944	.2940	.9227
B1C1	113.1111	283.8611	.6464	.9171
B1C2	113.3333	282.2500	.5431	.9179
B1C3	113.4444	278.7778	.5681	.9175
B1W1	113.0000	281.0000	.5816	.9174
B1W2	114.3333	285.2500	.3972	.9200
B1W3	113.2222	292.1944	.3023	.9207
B1L1	112.7778	279.6944	.7574	.9157
B1L2	112.8889	289.3611	.4334	.9193
B1L3	113.0000	283.0000	.6092	.9173
B1L4	113.5556	304.7778	-.1932	.9239
B1L5	113.1111	281.3611	.7446	.9161
Reliability Coefficients N of Cases = 9.0 N of Items = 33 Alpha = .9208				

The current study reported a Cronbach's alpha reliability score of 0.9208, for its pilot study of this Job Description Index (JDI) measuring instrument (see Table 1).

4.4 Ethical considerations

Permission was first sought from the management of the five companies and was granted prior to the questionnaire being distributed and administered. Respondents' consent was obtained after the purpose of the study was explained to them, and they had been informed that their participation was voluntary. The confidentiality and anonymity of the respondents and their associated companies was also ensured.

5. Discussion of the Results

5.1 Demographic data

The aim of the research was to determine the overall change in the dependent variable, namely employee motivation and job satisfaction across both pre- and post-groups, by each of the following demographical variables: company, gender, race, age, home language, marital status, job title, qualifications, training received over the last 18 months, the number of times such training had occurred, work experience in the same job, and work experience in the same company. The relationship between employee motivation and job satisfaction, and variables such as gender, race, age, home language, marital status, job title, education/qualification level, tenure and job level, is well documented in the literature (Naswall & De Witte, 2003; Matloga, 2005; Van Rensburg, 2004; Buitendach, 2004). Table 2 (below) summarises the descriptive findings.

Table 2: Summary of the descriptive findings

Across Pre- and Post-	Motivation and Job Satisfaction	
		p val
Overall	No significant difference	0.477
Company	Significant increase - Chicken Breeding	0.000
	Significant increase - Financial Sector	0.012
	Significant decrease - Truck Manufacturing	0.000
	Increase - (not significant) Bus Transport	0.052
Skilled	Increase (not significant)	0.092
Semi-skilled	Decrease (not significant)	0.170
Gender	Significant increase Females	0.001
Race	No significant difference	
Age	No significant difference	
Home Language	Significant increase South Sotho (NP)	0.024
Marital Status	Increase divorced (not significant)	0.073
Qualification	Significant increase Post-Matric	0.002
Same Job	Significant increase 6 to 10 years	0.028
Same Company	No significant difference	
NP - Non-parametric		
P - Parametric		

Table 2 shows that the p value of 0.477 is not less than 0.05, indicating insufficient evidence at a 5% level of significance, to suggest that the population mean "motivation and job satisfaction scores" is significantly different across both the pre- and post-groups. The most common feature of these findings relates to the response of the skilled workers, which is positive. Thus, the study revealed a clear relationship between this variable and training, especially as it pertains to skilled employees. The categories of demographic variables that led to a significant increase in the dependent variable "employee motivation and job satisfaction", consisted of skilled workers, females, respondents from the South Sotho language group, those who had post-Matric qualifications, and respondents with 6 to 10 years' experience in the same job.

According to Wood and Sella (2000:461), putting semi-skilled employees through training might not be an easy job.

Their findings revealed that a significant number of existing employees with only limited formal education and many years of service, might feel threatened by the training process. They further reported that it is precisely this same group who are most likely to be critical of the training initiative, seeing it as little more than a managerial attempt to force employees to work harder. There is little doubt that some formal certification would do much to alleviate employee mistrust in this area (Wood & Sella, 2000:461). It should be recognised that the former apartheid system resulted in grossly unequal access to education and training, perpetuating serious labour-market distortions (Horwitz & Franklin, 1996:12).

Table 3: Summary results of the three variables

	Descriptive Construct Mean Scores and p Values		
	Once	**Two or more Times**	**P value**
Motivation and Job Satisfaction	97.25	109.96	0.000
Effectiveness of Training - P	162.5	172.48	0.124
- NP			0.313
Self Performance - P	32.82	32	0.164
- NP			0.222
P - Parametric			
NP – Non-parametric			

Of those respondents who received training, 65% (No = 340) had been trained once; 30% had been trained twice (No = 157); and 4.6% (No = 24) three or more times in the last 18 months. The findings on this construct reflect that for a staff member who receives training twice or more times, his/her level of motivation and job satisfaction will be significantly higher than a staff member who received training only once in the last 18 months. Neal *et al*. (2000) concur with this finding, when they say that the organisational climate is thought to exert a strong impact on individual motivation to achieve work outcomes. Cronje *et al*. (2006:222) add that without a well-trained and motivated workforce, organisations cannot be successful.

In the current study, although effectiveness of training is higher for those respondents receiving more training, the change is not significant. The findings of the study conducted by Kappelman and Prybutok (1995:14) on the relationship between worker satisfaction and training, indicates that the correlation between Total Quality Management (TQM) training and satisfaction with training was 0.096 ($p < .262$), while the correlation between empowerment and satisfaction with training was .236 ($p < .005$) - nearly 150 percent larger. Kappelman and Prybutok (1995:15) further report that giving workers an empowering opportunity, albeit insignificant in relation to its impact on the overall change process, can have a significant effect on that employee's motivation and satisfaction and, to some extent, on the overall success of the TQM programme and of the organisation.

Table 4: Descriptive statistics (frequencies) by pre- and post-groups and by gender

			Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Pre	Valid	Male	366	60.6	60.7	60.7
		Female	237	39.2	39.3	100.0
		Total	603	99.8	100.0	
	Missing	System	1	.2		
	Total		604	100.0		
Post	Valid	Male	339	64.4	64.4	64.4
		Female	187	35.6	35.6	100.0
		Total	526	100.0	100.0	

An overwhelming majority (60.6% for pre- and 64.4% for post-) of the respondents was male, with women comprising about 39.2% for pre- and 35.6% for post-.

5.2 Test for motivation and job satisfaction by frequency of training

Kolmogorov Smirnov tests from Table 5 indicate neither training frequency distribution differs significantly from normality, and therefore parametric tests were used.

Table 5: Kolmogorov Smirnov Test for Motivation and Job Satisfaction by frequency of training

How much of such training in the last 18 months			Motivation and Job Satisfaction
Once	N		340
	Normal Parameters	Mean	97.25
		Std. Deviation	25.400
	Most Extreme Differences	Absolute	.051
		Positive	.035
		Negative	-.051
	Kolmogorov-Smirnov Z		.941
	Asymp. Sig. (2-tailed)		.339
Two or more Times	N		181
	Normal Parameters	Mean	109.96
		Std. Deviation	23.071
	Most Extreme Differences	Absolute	.090
		Positive	.045
		Negative	-.090
	Kolmogorov-Smirnov Z		1.205
	Asymp. Sig. (2-tailed)		.110

Table 6: How many such training sessions in the last 18 months?

	How much of such training in the last	N	Mean	Std. Deviation	Std. Error Mean
Motivation and Job Satisfaction	Once	340	97.25	25.400	1.378
	Two or more Times	181	109.96	23.071	1.715

The results show a p value of 0.000 in Table 7 (below), which is significantly high. From Table 6 (above), those respondents who received training two or more times, reveal a significantly higher score in the motivation and job satisfaction measuring instrument, than those respondents who received training only once in the last 18 months.

Table 7: Independent t-test for 'motivation and job satisfaction' by 'how many of such training sessions in the last 18 months?' in the post-group (grouped)

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Motivation and Job Satisfaction	Equal variances assumed	1.808	.179	-5.611	519	.000	-12.709	2.265	-17.159	-8.259
	Equal variances not assumed			-5.778	399.034	.000	-12.709	2.200	-17.033	-8.385

5.3 Pearson's correlation coefficient re: effectiveness of training and motivation and job satisfaction

We studied the relationship and potential modelling of the two variables 'effectiveness of training' and 'motivation and job satisfaction' from Table 8 and 9. The dependent variable is the latter, and the independent variable is the former.

Table 8: Pearson's correlation coefficient re: 'effectiveness of training' and 'motivation and job satisfaction

		EOT	MOTJS
EOT	Pearson Correlation	1	.426
	Sig. (2-tailed)		.000
	N	525	525
MOTJS	Pearson Correlation	.426	1
	Sig. (2-tailed)	.000	
	N	525	526

Table 9: R-square statistics for the model 'effectiveness of training' (independent variable) and 'motivation and job satisfaction' (dependent variable)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.426	.182	.180	22.956

Table 10: Significance of the model (f test), 'effectiveness of training' (independent variable) and 'motivation and job satisfaction' (dependent variable)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	61214.259	1	61214.259	116.156	.000
	Residual	275620.9	523	527.000		
	Total	336835.1	524			

Table 11: The full regression model extracted, 'effectiveness of training' (independent variable) and 'motivation and job satisfaction' (dependent variable)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	76.123	2.553		29.811	.000
	Effectiveness of Training	.153	.014	.426	10.778	.000

It is evident from Tables 10 and 11, that the Pearson's correlation coefficient of 0.426 is significant, with a p value of 0.000 (Table 11) - and which is less than 0.05 (significance level). Additionally, R square which is an indication of how well the model fits the data by explaining what proportion of total variance is explained by the model - is reported at 42.6% (see Table 9). This is a large proportion of the total variance. In addition, the model is significant, as is explained by Table 10, where the p value of 0.000 is less than 0.05. The final model (Pearson's correlation coefficient = 0.426 and R^2 = 42.6%), which is significant (see Tables 10 to 11), reads as follows: Y = 76.123 + 0.153 Effectiveness of Training. What is also interesting from this finding, is that if the 'effectiveness of training' score increases by one, the 'motivation and job satisfaction' score will increase by 0.153. Furthermore, this shows that there is a strong positive correlation between these two variables, meaning that knowledge of the 'effectiveness of training' score can go a long way in predicting the level of 'motivation and job satisfaction'.

6. Summary and Recommendations

This study aimed to determine the impact of skills transfer on employee motivation and job satisfaction. It is clear from the findings that the underlying hypothesis is confirmed, namely that training has an impact on employee motivation and performance. There is a clear relationship between the employee motivation variable and training, especially as it pertains to skilled employees - employees who received more training were more motivated than those who received less or no training at all. The evident categories of demographic variables that led to a significant increase in the dependent variable 'employee motivation and job satisfaction', consisted of skilled workers, females, respondents from the South Sotho language group, those who had post-Matric qualifications, and respondents with 6 to 10 years' experience in the same job. Furthermore, it can safely be inferred that a staff member who receives training twice or more times in the last 18 months, will have a level of motivation and job satisfaction that is significantly higher than a staff member who received training only once during the same period. Kappelman and Prybutok (1995:15) reported that giving workers an empowering opportunity, albeit insignificant in relation to its impact on the overall change process, can have a significant effect on such employees' motivation and satisfaction. It is evident from the findings that the more frequently organisations invest in human capital empowerment, the more assured they can be of improved performance. A happy workforce is the most productive workforce.

References

Ary, D., Jacobs, L.C. & Razavieh, A. 2002. Introduction to research in education (6th Ed.). Belmont, CA: Wadsworth/Thomson Learning.

Baard, V.C. 2003. The design and implementation of an interactive IT Consulting System to improve performance in South African Small Business. D.Tech. Dissertation (Unpublished) - Technikon Free State.

Baldwin, T.T. & Ford, J.K. 1988. Transfer of training: A review and directions for future research. Personnel Psychology, 41 (2), 63-105.

Buitendach, J.H. 2004. Job insecurity and job satisfaction in selected organisations in South Africa. Doctoral Thesis (Unpublished). University of the North-West, Potchefstroom Campus.
Bull, I.H.F. 2005. The relationship between job satisfaction and organisational commitment amongst high school teachers in disadvantaged areas in the Western Cape. Unpublished Magister Artium (Unpublished). Department of Industrial Psychology, Faculty of Economic and Management Science, University of the Western Cape.
Carrell, M.R., Elbert, N.F., Hatfield, R.D., Grobler, P.A., Marx, M. & Van der Schyf, S. 2000. Human Resource Management in South Africa. Cape Town: Maskew Miller Longman.
Cascio, W. 1989. Using utility analysis to assess training outcomes. In Goldstein, I.L. (Ed.). Training and development in organisations, pp. 469-486. San Francisco: Jossey-Bass.
Chiou, H., Lee, Y. & Purnomo, S.H. 2010. The Influences of Transfer of Training on Relationship between Knowledge Characteristic of Work Design Model and Outcomes. International Journal of Innovation, Management and Technology (IJIMT), 1(2):16-123.
Chiu, R. 2000. Does perception of pay equity, pay satisfaction, and job satisfaction mediate the effect of positive affectivity on work motivation? Social Behavior and Personality, 28(2),177-184.
Christen, M., Lyer, G. & Soberman, D. 2006. Job Satisfaction, Job Performance, and Effort: A Reexamination Using Agency Theory. Journal of Marketing, 70 (January), 137-150.
Coldwell, D.A.L. 1997. Generating Effective Performance in Management Affirmees: Exploring the Imperatives. Management Dynamics, 6 (3), 24-39.
Cooper, D.R. & Schindler, P.S. 2001. Business Research Methods. 7th Edition. Boston: McGraw-Hill Irwin.
Cronje, G.J. de J., du Toit, G.S., Mol, A.J., van Reenen, M.J. & Motlatla, M.D.C. 1997. Introduction to Business Management. 4th Edition. Johannesburg: International Thomson Publishing (Southern Africa).
Cronje, G.J. de J., du Toit, G.S. & Motlatla, M.D.C. 2006. Introduction to Business Management. 6th Edition. Cape Town: Oxford University Press.
De Klerk, J.J. 2001. Motivation to work, work commitment and man's will to meaning. Doctoral thesis (Unpublished). University of Pretoria.
De Vos, A.S., Strydom, H., Fouche, C.B. & Delport, C.S.L. 2005. Research at grass roots: For the Social Sciences and Human Service Professions. 2nd Edition. Pretoria: Van Schaik Publishers.
Dransfield, R., Howkins, S., Hudson, F. & Davies, W. 1996. Human Resource Management for Higher Awards. Oxford: Heinemann Educational Publishers.
El Toukhy, M.M. 1998. Globalisation and developing countries. The South African Journal of Economics, 66 (4), 464-491.
Ensor, L. 1997. Jobless figure as bad as generally believed - survey. Business Day, December 7, pg. 15.
Faerman, S.R. & Ban, C. 1993. Trainee Satisfaction and Training Impact: Issues in Training Evaluation. Public Productivity & Management Review, 16(3) (Spring), 299-314.
Farr, J.I. & Middlebrooks, C. 1990. Enhancing motivation to participate in professional development. In Willis, S.L. & Dubin, S.S. (Eds.). Maintaining professional competence, pp. 195-213. San Francisco: Jossey-Bass.
French, W.L. 1994. Human Resources Management. 3rd Edition. Geneva: Houghton Mifflin Company.
George, J.M. & Jones, G.R. 2002. Organisational Behaviour. 3rd Edition. International Edition. Upper Saddle River, New Jersey: Prentice-Hall International.
Griesel, J.D. 2004. Human Resources Management: A Contemporary Model for Principals of Free State Schools. Ph.D. thesis (Unpublished). Department of Comparative Education and Education Management, University of the Free State, Bloemfontein.
Grobler, P.A., Warnich, S., Carrell, M.R., Elbert, R.D. & Hatfield, R.D. 2002. Human Resource Management in South Africa. 2nd Edition. Australia: Thompson.
Hair, J.F. Jr, Anderson, R.E., Tatham, R.L. & Black, W.C. 1998. Multivariate data analysis. 5th Edition. Upper Saddle River, N.J.: Prentice-Hall International.
Herzberg, F.H. 1966. Work and the nature of man. New York: World Publishing Company.
Herzberg, F.H., Mausner, B. & Snyderman, B.S. 1959. The motivation to work. New York: Wiley.
Holton, E.F. III, 1996. The flawed four-level evaluation model. Human Resource Development Quarterly, 7(1), 5-25.
Horwitz, F.M. & Franklin, E. 1996. Labour market flexibility in South Africa: Researching recent developments. South African Journal of Labour Relations, 20(1), 3-40.
Hough, J. & Neuland, E. 2001. Globalisation of the world economy: Strategies for South African managers. Management Today, February, 26-29. http://dx.doi.org/10.2224/sbp.2000.28.2.177
Humphrey S.E., Nahrgang J.D. & Morgeson, F.P. 2007. Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. Journal of Applied Psychology, 92(5), 1332-1356.
Huysamen, G.K. 1980. Psychological testing in South Africa. Pretoria: Academica.
James, L.R., Hartman, A., Stebbins, M.W. & Jones, A.P. 1977. Relationships between psychological climate and a VIE model for work motivation. Personnel Psychology, 30, 229-254.
Jorgenson, D.O., Dunnette, M.D. & Pritchard, R.D. 1973. Effects of the manipulation of a performance-reward contingency on behaviour in a simulated work setting. Journal of Applied Psychology, 57, 271-280.
Kappelman, L. & Prybutok, V. 1995. Empowerment, Motivation, Training, and TQM Program Implementation Success. Total Quality Management, IM May/June, 12-15.
Kerlinger, F.N. & Lee, H.B. 2000. Foundation of behavioural research. 4th Edition. New York: Harcourt College Publishers.
Lawler, E.E. & Suttle, J.L. 1973. Expectancy theory and job behaviour. Organizational Behaviour and Human Performance, 9, 482–503.
Li-Ping Tang, T. & Talpade, M. 1999. Sex differences in satisfaction with pay and co-workers. Public Personnel Management, 28, 345-348.
Mathieu, J.E., Tannenbaum, S.I. & Salas, E. 1992. Influences of individual and situational characteristics on measures of training effectiveness. Academy of Management Journal, 35(4), 828-847.
Matloga, E.S. 2005. Investigating job satisfaction of primary and secondary rural and farm school teachers. M.Com. Dissertation (Unpublished). University of Johannesburg, Auckland Park Campus, Johannesburg.
Marx, A.E. 1993. In Marx, H.J.J., Reynders, H.J.J. & Van Rooyen, D.C. (Eds.). *Business Economics*. Pretoria: J.L. van Schaik.

Mayfield, J. & Mayfield, M. 2002. Leader communication strategies critical paths to improving employee commitment. American Business Review, 20(2), 89-94.
Montesino, M. 2002. Strategic alignment of training, transfer-enhancing behaviors, and training usage: A post-training study. Human Resource Development Quarterly, 13, 89-108.
Morgeson, F.P., Delaney-Klinger, K.A. & Hemingway, M.A. 2005. The importance of job autonomy, cognitive ability, and job-related skill for predicting role breadth and job performance. Journal of Applied Psychology, 90, 399-406.
Morgeson, F.P. & Humphrey, S.E. 2006. The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. Journal of Applied Psychology, 91, 1321-1339.
Naswall, K. & De Witte, H. 2003. Who feels insecure in Europe? Predicting job insecurity from background variables. Economic and Industrial Democracy, 24(2), 189-215.
Neal, A., Griffin, M.A. & Hart, P.M. 2000. The impact of organisational climate on safety and individual behaviour. Safety Science, 34(1-3), February, 99-109. Accessed on 10 January 2009. http://www.sciencedirect.com/science?_ob=ArticleURL_udi=B6VF9-40BGF24-6&_us.
Nel, P.S. 2001. Training and development of employees and career management at organizational level. In Nel, P.S. (Ed.). Human Resources Management. 5th Edition. Cape Town: Oxford University Press.
Noe, R.A. 1986. Trainees' attributes and attitudes: Neglected influences on training effectiveness. Academy of Management Review, 11, 736-749.
Paterson, T.T. 1972. Job Evaluation: A New Method: Volume One. London: Business Books.
Pincus, J.D. 1986. Communication satisfaction, job satisfaction, and job performance. Human Communication Research, 12(3), 395-419.
Price, A. 2000. Principles of Human Resource Management. An active learning approach. Oxford: Blackwell Publishers Limited.
Pritchard, R.D., DeLeo, P.J. & Von Bergen, C.W. 1976. A field experimental test of expectancy-valence incentive motivation techniques. Organisational Behaviour and Human Performance, 15, 355-406.
Robbins, S.P. 1998. Organizational Behaviour Concepts, Controversies, Applications. 8th Edition. International Edition. New Jersey: Prentice-Hall International.
Robbins, S.P. & De Cenzo, D.A. 2001. Essential Concepts and Applications. Fundamentals of Management. 2nd Edition, International Edition. New Jersey: Prentice Hall International.
Roodt, G. 2004. Concept redundancy and contamination in employee commitment research: Current problems and future directions. South African Journal of Industrial Psychology, 30(1), 82-90.
Rosen, R.H. 1992. The anatomy of a healthy company. In Renesch, J. (Ed.). New traditions in business, pp. 109-122. San Francisco: Berrett-Koehler Publishers.
Rudestam, K.E. & Newton, R.R. 2001. Surviving Your Dissertation. A Comprehensive Guide to Content and Process. 2nd Edition. London: Sage Publications.
Smith, P.C., Kendall, L.M. & Hulin, C.L. 1969. The Measurement of Satisfaction in Work and Retirement. Chicago: Rand McNally.
Statistical Package for Social Sciences (SPSS). 2003. SPSS 12.0 for Windows. Chicago, IL: Author.
Struwig, M. & Smith, E. 2000. The interaction between training and change in South African organisations. South African Journal of Business Management, 31(3), 113-119.
Swanepoel, B. 2000. South African Human Resource Management Series and Practice. 2nd Edition. Johannesburg: Juta & Co.
Tosi, H.L., Rizzo, J.R. & Carroll, S.J. 1994. Managing Organisational Behaviour 3rd Edition. Massachusetts: Blackwell Publishers.
Van Hoek, G. & Black, T. 2002. Get real and train people to achieve. Companies should beware of the 'rain-dance' approach. In SundayTimes, Business Times, January 27, pg 2.
Van Rensburg, K.J. 2004. A predictive model of employee commitment in an organisation striving to become world-class. Doctoral thesis (Unpublished). Rand Afrikaans University. Johannesburg.
Vroom, V. 1964. Work and Motivation. New York: Wiley.
Whittington-Jones, A. 2005. The Development and Implementation of a Performance Management System: A Case Study. MBA Dissertation (Unpublished). Rhodes Investec Business School, Rhodes University.
Williams, R.S. 2000. Performance Management, perspectives on employee performance. London: Thomson Learning.
Wood, G. & Sella, R. 2000. Making human resource development work: A case study on internal training within the Eastern Cape textile industry, South Africa. Human Resource Development International, 3(4), 451-464.
Yamnill, S. & McClean, G.N. 2001. Theories Supporting Transfer of Training. Human Resource Quarterly, 12(2),195-208.
Yousef, D.A. 2000. Job satisfaction as a mediator of the relationship between role stressors and organizational commitment. Journal of Managerial Psychology, 17, 250-266.
Yu, C., Yu, C. & Yen, H. 2009. A Study on the Relationship between Achievement Motivation, and Work Attitude under the Moderator of Pay Institute Perception - A Case Study of Administrative Staff of a District Hospital in Taiwan. http:///www.bai-conference.org/BAI2009/Papers/1451.doc