THE EFFECT OF ORGANISATIONAL RESTRUCTURING ON JOB SATISFACTION, CAREER ASPIRATIONS AND STRESS LEVELS OF EMPLOYEES

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OPSOMMING
Die navorsing wat hier gerapporteer word, het die effek van organisatoriese herstrukturerings op werknemers se werkstevredenheid, loopbaanperspekte en spanningsslakke ondersoek. Ommedelik nadat herstrukturing in die organisasie plaasgevind het, is die werknemers wat deur die herstrukturerings gehard is, goeie oor vas te stel van herstructurerings 'n impak op die drie veranderlikes sou hé. Agt maande later is hul werkstevredenheid, loopbaanperspekte en spanningsslakke weer gemee. Daar is gevind dat die werknemers se resultate op organisatoriese herstrukturerings onverandert gebleef het. Die resultate het geen steun verleen aan die verwagting dat die tydverloop van agt maande die effek van organisatoriese herstrukturerings sal verminder nie en dat werknemers tot 'n groter mate werkstevredenheid sal eers nie. Dit blykter verder dat die tydverloop ook nie verbeterde loopbaanperspekte toegelaag het nie.

ABSTRACT
The field study reported here examined the effects of organisational restructuring on employees' job satisfaction, career aspirations and stress levels. Immediately after restructuring took place in the organisation, the employees affected by this event were tested to determine whether restructuring would impact on the three variables. Eight months after restructuring in the organisation took place their job satisfaction, career aspirations and stress levels were measured again. The results of the research indicated no changes in job satisfaction levels, career aspirations or stress levels. The results provided no support for the expectation that after a time lapse of eight months the effects of organisational restructuring would diminish and that workers would experience a greater degree of job satisfaction. In addition, it would appear that the time lapse did not improve perceived career prospects or that stress levels decreased.

The concept of planned organisation restructuring has been known in the business world for the past two or three decades. However, the most recent wave of restructuring is different from the known planned organisation restructuring process. Firstly, the literature indicates that the restructuring process appears to be cost driven, i.e. savings to maintain profitability. Secondly, it would appear that management is initiating the restructuring process based on the organisation's financial results (Tomasko, 1990).

Organisations today are still creating the illusion of progress by reacting to short term bad news by restructuring or other similar reactions that are questionable. However, few would question the premise that organisation restructuring is essential for making organisations flexible in an era of deregulation and global competition (Train, 1991).

Many organisations, however, are in worse shape, particularly in financial terms, after restructuring and more often than not, respond by more restructuring which places them in a vulnerable business situation (Finansies en Tegniek, 1994). Whether organisations are "downsizing", "right-sizing", or restructuring or engaged in all three, many organisations are cutting jobs to assist during difficult economic conditions.

Restructuring Dilemma
The wave of restructuring by major organisations with world-wide operations has continued for the last four years. This tendency has been particularly prevalent among organisations in the United States.

South Africa has not remained unscathed - this tendency, compounded by a strict monetary policy and the prevailing poor economic conditions, has manifested itself in this country.

During 1991 and 1992 most major companies in South Africa were involved in restructuring with subsequent job losses recorded across the board in all major sectors of the South African economy, notably in the mining, manufacturing and financial sectors.

Every major company has undertaken restructuring of its operations in an endeavour to reduce its major overhead expenditure, namely its salaries and wages. The effect however, is a change in the operational network and a moving away from the familiar. The last decade, characterised by restructuring as the major management tool to reduce costs, has caused a change of emphasis in the expectations and responsibilities of both employees and employers. A study by Tjosvold (1991), revealed that it is easy for top management to underestimate how difficult it is for employees to adapt to and use restructuring. "Reorganisation presents a whole host of questions and problems that employees must address and try to solve" (p. 81).

The consequences of indiscriminate retrenchments throughout organisations are only now being manifested in the broader economy world-wide. Fisher (1991), Klarreich (1988), Tjosvold (1991) and Tomasko (1990) maintain that across the board cuts in the staff complement lead to a decline in employee commitment to their companies, resentfulness after reductions have been implemented where the main concern was financial savings for the organisations. Tomasko (1990) states that this in turn creates organisations that avoid risks and lack the ability to innovate.

Klarreich (1988) remains emphatic that changing the organisational work flow chart, does not necessarily imply that the behavioural patterns of workers have changed. In the opinion of Fisher (1991) and Tjosvold (1991) the psychological contracts require to be redressed and frames of reference revised, which in turn requires a high degree of understanding on the part of management.
Thus, it can be argued that the success of any organisation is largely determined by how much support it receives from its employees. Until top management accept the view that their work force is an asset and should be meaningfully employed to respond to external events in order to gain market share, mediocrity will prevail because of a lack of commitment and the ability to innovate creatively. Hendricks (1990) argues that restructuring must be an ongoing process in order to recognise and respond to new markets and changing customer needs and preferences. He continues, however, to state that the restructuring process often proceeds at the cost of employee relations.

In summary it could be debated that indiscriminate, across-the-board staff cuts leave workers feeling embezzled and resentful of management, frustrated and confused and with a degree of hostility towards the organisation. Management therefore, cannot demand that workers relate to the importance of product customer satisfaction and improvement of quality when they are anxious about whether, or how long, they will remain employed.

The three variables indentified from the literature that could be influenced by restructuring would appear to be job satisfaction, career aspirations and stress levels. The question that begs an answer is whether job satisfaction, career aspirations and stress levels will be negatively affected by the restructuring process?

Beyond these observations, there are few substantive studies and little empirical information or evidence available having a bearing on the present study.

For purpose of clarity, the appropriate literature will be discussed under the headings: Job Satisfaction, Career Aspirations and Stress Levels.

RESTRUCTURING AND JOB SATISFACTION

The term “restructuring” has undergone a metamorphosis and is used today as synonymous with “retrencment”. In the late seventies, however, it was used more aligned to English and English’s (1974, p. 178) definition – “to change the relative position of part regions without changing their number”, and “to make a fundamental change in the relationship of parts of a field chiefly as a result of change…”

In today's corporate world, terms such as “downsizing”, “right-sizing” and “restructuring”, are used interchangeably and refer to reducing the workforce in order to cut costs. Initially this reduction related mainly to lower paid staff. However, restructuring of organisations on the scale that has taken place over the past four years, has never been experienced by companies before, particularly as it now equally affects top and middle management.

Job satisfaction has been defined by Smith, Kendall and Hulin (1969, p. 179) as the “extent to which an employee expresses a positive orientation towards a job”. In addition, job satisfaction has been treated as both a global concept referring to overall satisfaction and as a facet specific concept referring to various aspects of work, such as physical conditions, remuneration, workload and career aspirations.

Although “job satisfaction” per se has been researched in relation to various other variables, such as performance appraisals and supervisor attitudes towards subordinates, no specific research relating to restructuring and job satisfaction could be found.

Regarding the satisfaction-performance hypothesis, Organ (1988) argues that high productivity and worker satisfaction form only an “illusive correlation…between two variables that we logically think should interrelate, but in fact do not” (p. 547). He ascribes this to the apparently strong intuitive belief among practitioners that job satisfaction is indeed an important determinant of productivity, regardless of empirical evidence to the contrary.

Organ (1988) suggests that perceived unfairness calls for a basic re-evaluation of the relationship between the staff and management – a process whereby staff will need to consider their loyalty to the organisation.

Claassen and Backer (1989, p. 142) poses the question as to whether the rationalisation of companies is a renews or destroyer of work forces? They maintain that rationalisation has become “fashionable” with scant attention being paid to worker fears and expectations during the process of restructuring.

The authors conclude that significantly more employees will rate the experience as extremely negative and that the main issue at stake is job security. “The majority of workers feel that their loyalty towards an organisation is seriously affected by the change process” (p. 145).

Claassen and Backer are of the opinion that rationalisation is a complex and involved process which requires careful planning. They found conclusive evidence that employees were “bitely unhappy” (p. 142) with the way management introduced the change process. Despite the fact they realised that drastic changes were needed to avert the crisis of a possible shut-down of the organisation.

The American Management Association surveyed 1100 companies during 1991 and 1992 and found that middle managers constituted 7 to 8 percent of the total workforce, but they comprised 17 percent of the employees retrenched (middle management is defined as employees between first-line supervisors and senior managers) (Fisher, 1991).

The Roper Organisation in New York City surveyed approximately 1200 employees every three years for a number of decades. They concluded that job satisfaction in America is at its lowest ebb since the inception of their surveys (Furton, 1991).

The first fundamental consideration of most organisations is their profitability in a highly competitive environment. If an organisation is to gain a competitive advantage in order to survive, it will need to determine sources of cost saving. These sources include economies of scale, technology, access to raw materials and salaries and wages, the largest invariably being the largest immediate source of cost savings. Against the background of profitability and cost saving the unintended consequences of organisational restructuring namely decreases in commitment, job satisfaction and performance, have been discussed. However, very little empirical research to substantiate the foregoing discussion is available.

RESTRUCTURING AND CAREER ASPIRATIONS

A decade ago career prospects and upward moving careers, in terms of the hierarchical structures of organisations, were favourable for career planning. In the post-career world of today, with the reduction of hierarchical levels the mapped out “career path” has all but disappeared from the corporate world. But to assume that this is solely concerned with the individual's career path would be erroneous. The ramifications of restructuring go beyond the individual; it affects the organisation as well. Problematic to this phenomenon is the growing discrepancy between the long term nature of employees' liabilities (e.g. housing loans, vehicle financing, schooling, etc) and the employees' increasingly short term job prospects (Keenan-Smith, 1992).

A further implication of restructuring and the collapse of traditional career structures is the reduction of permanent full-time career managers. The question which can be posed to both the organisation would be prepared to expend training and development efforts on staff if their tenure with the organisation is considered short-term (Caulkin, 1995).
Caulkin (1995) argues for a "new contract" to be established between employee and employer and for re-establishing some of the links which were broken in the 1980's. He believes that individuals and organisations have different career needs which "can be met by a flexible contract offer" (Caulkin, 1995, p. 28).

In summary it can be stated that in flatter non-hierarchical organisations there are relatively few positions which require managing. Thus moving through a "bureaucratic grading structure" is no longer valid. Careers should rather be managed and planned seeking out better projects and products to work with. The formation of smaller workgroups (clusters, project teams and matrix systems) requires an innovative approach to career planning. The emphasis perhaps moving to employability and using the multifunctional nature of teams and exposure to other disciplines as an integral part of career mapping.

From the foregoing it is apparent that the changing organisation structures currently prevailing, does affect career aspirations and that employees are no longer overly concerned with their upward mobility in organisations but are more concerned with their employability.

RESTRUCTURING AND STRESS LEVELS

Previously undertaken research [Charlesworth and Nathan (1993), Cotton (1990) and Greenberg (1987)] regarding stress levels have not empirically investigated organisational restructuring's effects on stress levels, but rather the levels of stress experienced by individuals in organisations as a daily experience. No research directly related to the restructuring process and stress levels could be found. Although frequent reference is made to employee attitudes and mind sets and speculative reference to the stress factor after restructuring is postulated, no empirical research could be found to substantiate arguments that stress levels either increase or decrease after restructuring.

STATEMENT OF PROBLEM

The basic problem investigated by this study relates to whether the restructuring process could influence job satisfaction, career aspirations and stress levels of employees immediately after restructuring. Equally to determine whether a time lapse would diminish the effect of organisational restructuring on job satisfaction, career aspirations and stress levels of employees.

HYPOTHESES

Because of limited space only the alternative hypotheses will be given here. The sub-hypotheses will be integrated with the global hypotheses: The null-hypotheses postulate no statistically significant differences in the vectors of means or group means of the groups that are compared. By contrast the alternative hypotheses postulate statistically significant differences in the vectors of means or group means of the groups that are compared.

Hypothesis 1
The vector of means of the difference scores (post-test scores minus pre-test scores) in respect of the three measuring instruments will differ statistically significantly from a null vector, i.e. there will be a statistically significant difference between the pre-test scores and the post-test scores. It is also postulated that the means of the pre-test and post-test scores in respect of each variable, will differ statistically significantly.

Hypothesis 2
The vectors of means of the pre-test scores of the two genders, in respect of the three measuring instruments, will differ statistically significantly from one another. It is also postulated that the means of the pre-test scores of the two gender groups will differ statistically significantly in respect of each of the variables.

Hypothesis 3
The vectors of means of the post-test scores of the two genders, in respect of the three measuring instruments, will differ statistically significantly from one another. It is also postulated that the means of the post-test scores of the two gender groups will differ statistically significantly in respect of each of the variables.

Hypothesis 4
The vectors of means of the pre-test scores of groups with different lengths of service (two periods), in respect of the three measuring instruments, will differ statistically significantly from one another. It is also postulated that the means of the pre-test scores of the groups with different lengths of service (two periods) will differ statistically significantly in respect of each of the variables.

Hypothesis 5
The vectors of means of the post-test scores of groups with different lengths of service (two periods), in respect of the three measuring instruments, will differ statistically significantly from one another. It is also postulated that the means of the post-test scores of the groups with different lengths of service (two periods) will differ statistically significantly in respect of each of the variables.

Hypothesis 6
The vectors of means of the pre-test scores of the three educational groups, in respect of the three measuring instruments, will differ statistically significantly from one another. It is also postulated that the means of the pre-test scores of the three groups will differ statistically significantly in respect of each of the variables.

Hypothesis 7
The vectors of means of the post-test scores of the three educational groups, in respect of the three measuring instruments, will differ statistically significantly from one another. It is also postulated that the means of the post-test scores of the three groups will differ statistically significantly in respect of each of the variables.

METHOD

Subjects
The respondents are staff members from a large financial institution with branch offices located mainly in the metropolitan areas of the Republic of South Africa. They are predominantly Afrikaans speaking as the institution serves mainly the Afrikaans market segment. A random sample of 310 employees was drawn from the universe of 4000 employees. The sample ranged from clerical, secretarial, marketing, accounting to managerial level. All staff members are permanently employed by the organisation. Their ages range from 18 to 50 years with a preponderance of candidates in the age group 24 - 35 years. Their levels of education range from standard ten to post graduate level, the majority falling in the standard ten category. Fifty six percent of the sample is male and 44 percent is female.

Instruments
Job satisfaction was measured with the short form of the Facet-free Job Satisfaction Questionnaire of Quinn and Staines (1979). The authors used fifteen items to "tap a worker's general affective reaction to the job" (p. 205). The Facet-free Job Satisfaction Questionnaire was selected for three main reasons: its brevity, the fact that it is facet-free and does not measure specific job elements, and because of its applicability to all levels and types of employees. The applicability of the Facet-free Job Satisfaction Questionnaire to all levels and types of employees was a primary criterion for item selection in the short form. Beehr quoted by Quinn and Staines, (1976), in a study of 651 employees from five organisations reported a Spearman-Brown reliability coefficient of 0,80 for the Facet-free Job Satisfaction Questionnaire.
The second measuring instrument used was Smith’s (1976) Career Future Questionnaire to measure the career aspirations of respondents. Reliability evidence presented by Smith showed an alpha coefficient (from a validation sample of 3,610) of 0.78.

The third measuring instrument used to measure stress levels among employees was the Revised Impact of Event Scale of Horowitz, Wilmer and Alvarez (1979). No published information regarding the reliability coefficients was available but the content validity of the instrument was such as to justify its selection. Accordingly the reliability for this instrument was established on the present sample and proved to be highly satisfactory.

All three measuring instruments were translated into Afrikaans in view of the particular culture prevailing in the organisation. Cronbach’s coefficient alpha was used to determine the reliabilities of the translated questionnaires. The questions within each instrument proved reliable.

The reliability coefficient according to Cronbach’s coefficient alpha for the three measuring instruments were:

Job satisfaction coefficient alpha = 0.917 (15 items)
Career aspirations coefficient alpha = 0.922 (11 items)
Stress levels coefficient alpha = 0.921 (15 items)

Procedure
A booklet containing the three selected questionnaires was given to each of the subjects. The booklet was accompanied by a covering letter from the institution’s Human Resources Director, asking for their collaboration.

The questionnaires were coded so as to be able to repeat the test battery at a future date. The respondents were assured that the data would be kept confidential.

Statistical Analysis
The three questionnaires, referred to above, were applied to the full sample (N=310) immediately after restructuring of the organisation. Eight months later the sample was retested with the same measuring instruments. In order to determine whether the vector of means of the difference scores (post-test scores minus pre-test scores) differs statistically significantly from a null-vector, Hotelling’s $T^2$-test for dependent samples was used.

The sample was subsequently divided into two groups, first in terms of gender, and secondly in terms of length of service (less than three years and more than three years). In order to determine whether the vectors of means of the pre-test scores and post-test scores of the two genders differed statistically significantly from one another, Hotelling’s $T^2$-test for independent samples, was used. The same was done for length of service. Following the Hotelling $T^2$-tests, t-tests were computed to determine whether there are statistically significant differences between the group means.

The sample was next divided into three groups on the basis of the academic qualifications of the respondents (up to matric, graduates, and post-graduates). In order to determine whether the vectors of means of the pre-test scores and post-test scores of the three groups differed statistically significantly from one another, multivariate analysis of variance (MANOVA) was used. Following the MANOVA, one-way analysis of variance (ANOVA) was used to determine whether there are statistically significant differences in group means. Scheffe’s post-hoc multiple comparisons technique was used to determine which groups differed from one another.

RESULTS
In order to determine whether the vector of means of the difference scores in respect of the three measuring instruments (post-test scores minus pre-test scores) differs statistically significantly from a null-vector, use was made of Hotelling’s $T^2$-test for dependent samples. The results are given in Table 1:

From Table 1 it is apparent that there is no statistically significant difference in the vector of means of the difference scores and a null-vector, i.e. the pre-test and post-test scores do not differ statistically significantly: Hotelling’s $T^2=5.7840$, with an associated F-value of 1.8964 and degrees of freedom of 3 and 120. This F-value is statistically not significant (p=0.1338). Also the t-values in respect of the three variables, X1, X2 and X3, are statistically not significant. The null-hypothesis is therefore not rejected. Accordingly there is no support for Hypothesis 1.

In order to determine whether the vectors of means of the pre-test scores of the two genders, in respect of the three measuring instruments, differ statistically significantly, use was made of Hotelling's $T^2$-test for independent samples. The results are given in Table 2:

### Table 1
**SIGNIFICANCE OF DIFFERENCES IN MEANS OF DIFFERENCE SCORES (POST-TEST SCORES MINUS PRE-TEST SCORES): HOTELLING $T^2$-TEST FOR DEPENDENT SAMPLES**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$X$</th>
<th>$S$</th>
<th>$N$</th>
<th>t-value</th>
<th>DF</th>
<th>p(t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>1.5171</td>
<td>14,6211</td>
<td>123</td>
<td>1,00</td>
<td>122</td>
<td>0.3198</td>
</tr>
<tr>
<td>X2</td>
<td>0.4228</td>
<td>11,9809</td>
<td>123</td>
<td>0.39</td>
<td>122</td>
<td>0.6962</td>
</tr>
<tr>
<td>X3</td>
<td>-1,4309</td>
<td>10,0140</td>
<td>123</td>
<td>-1.58</td>
<td>122</td>
<td>0.1156</td>
</tr>
</tbody>
</table>

Hotelling $T^2 = 5.7840$
F-value = 1.8964
p-value = 0.1338 (Not significant)

### Table 2
**SIGNIFICANCE OF DIFFERENCES IN MEANS BETWEEN MALES AND FEMALES IN RESPECT OF THE POST-TEST SCORES: HOTELLING $T^2$-TEST FOR INDEPENDENT SAMPLES**

<table>
<thead>
<tr>
<th>Variable</th>
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<th>$S_1$</th>
<th>$N_1$</th>
<th>$X_2$</th>
<th>$S_2$</th>
<th>$N_2$</th>
<th>Levene F</th>
<th>DF</th>
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<th>t-value</th>
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<td>69</td>
<td>76,8333</td>
<td>15,1044</td>
<td>54</td>
<td>4.42</td>
<td>1 &amp; 121</td>
<td>0.0376*</td>
<td>1.37</td>
<td>97.4</td>
<td>0.1753</td>
</tr>
<tr>
<td>X2</td>
<td>31.2174</td>
<td>11,2261</td>
<td>69</td>
<td>31,0000</td>
<td>13,2793</td>
<td>54</td>
<td>2.97</td>
<td>1 &amp; 121</td>
<td>0.0874</td>
<td>0.10</td>
<td>121.0</td>
<td>0.9218</td>
</tr>
<tr>
<td>X3</td>
<td>29.0290</td>
<td>10,2784</td>
<td>69</td>
<td>29,7407</td>
<td>10,3344</td>
<td>54</td>
<td>0.03</td>
<td>1 &amp; 121</td>
<td>0.8678</td>
<td>-0.38</td>
<td>121.0</td>
<td>0.7044</td>
</tr>
</tbody>
</table>

Hotelling $T^2 = 5.3247$
F-value = 1.7456
p-value = 0.1614 (not significant)
From Table 2 it is apparent that there is no statistically significant difference in the vectors of means of the two genders in respect of the pre-test scores. Hotelling’s $T^2=5.3247$, with an associated F-value of 1.7456 and degrees of freedom of 3 and 119. This F-value is statistically not significant ($p=0.1614$). Also the t-values in respect of the three variables are statistically not significant. The null-hypothesis is therefore not rejected. Accordingly there is no support for Hypothesis 2.

In order to determine whether the vectors of means of the post-test scores of the two genders, in respect of the three measuring instruments, differ statistically significantly, use was made of Hotelling’s $T^2$-test for independent samples. The results are given in Table 3:

<table>
<thead>
<tr>
<th>Variable</th>
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<th>$N_1$</th>
<th>$X_2$</th>
<th>$S_2$</th>
<th>$N_2$</th>
<th>Levene F</th>
<th>DF</th>
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<th>t-value</th>
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<td>78,1667</td>
<td>15,0819</td>
<td>54</td>
<td>0.78</td>
<td>1 &amp; 121</td>
<td>0.3798</td>
<td>1.27</td>
<td>121</td>
<td>0.2053</td>
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<tr>
<td>$X_2$</td>
<td>30,7681</td>
<td>11,4931</td>
<td>69</td>
<td>32,5370</td>
<td>13,1288</td>
<td>54</td>
<td>0.65</td>
<td>1 &amp; 121</td>
<td>0.4216</td>
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<td>121</td>
<td>0.4278</td>
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<tr>
<td>$X_3$</td>
<td>27,4493</td>
<td>9,7597</td>
<td>69</td>
<td>28,5000</td>
<td>11,9001</td>
<td>54</td>
<td>7.95</td>
<td>1 &amp; 121</td>
<td>0.0056*</td>
<td>-0.53</td>
<td>101,6</td>
<td>0.6006</td>
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</table>

Hotelling $T^2 = 1.6417$
F-value = 0.5382
p-value = 0.6570 (not significant)

From Table 3 it is apparent that there is no statistically significant difference in the vectors of means of the two genders in respect of the post-test scores. Hotelling’s $T^2=1.6417$, with an associated F-value of 0.5382 and degrees of freedom of 3 and 119. This F-value is statistically not significant ($p=0.6570$). Also the t-values in respect of the three variables are statistically not significant. The null-hypothesis is therefore not rejected. Accordingly there is no support for Hypothesis 3.

In order to determine whether the vectors of means of the pre-test scores of the four groups with different lengths of service (less than three years and more than three years) in respect of the post-test scores: Hotelling’s $T^2=1.3500$, with an associated F-value of 0.4426 and degrees of freedom of 3 and 119. This F-value is statistically not significant ($p=0.7230$). Also the t-values in respect of the three variables are statistically not significant. The null-hypothesis is therefore not rejected. Accordingly there is no support for Hypothesis 4.

From Table 4 it is apparent that there is no statistically significant difference in the vectors of means of the four groups with different lengths of service (less than three years and more than three years) in respect of the post-test scores: Hotelling’s $T^2=1.3500$, with an associated F-value of 0.4426 and degrees of freedom of 3 and 119. This F-value is statistically not significant ($p=0.7230$). Also the t-values in respect of the three variables are statistically not significant. The null-hypothesis is therefore not rejected. Accordingly there is no support for Hypothesis 4.

<table>
<thead>
<tr>
<th>Variable</th>
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<th>$N_1$</th>
<th>$X_2$</th>
<th>$S_2$</th>
<th>$N_2$</th>
<th>Levene F</th>
<th>DF</th>
<th>p(F)</th>
<th>t-value</th>
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<td>61</td>
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<td>1 &amp; 121</td>
<td>0.1818</td>
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<td>$X_2$</td>
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<td>30,8197</td>
<td>11,6082</td>
<td>61</td>
<td>0.55</td>
<td>1 &amp; 121</td>
<td>0.4613</td>
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<td>$X_3$</td>
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<td>10,9899</td>
<td>62</td>
<td>28,5738</td>
<td>9,5052</td>
<td>61</td>
<td>3.03</td>
<td>1 &amp; 121</td>
<td>0.8410</td>
<td>0.82</td>
<td>119,1</td>
<td>0.4125</td>
</tr>
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</table>

Hotelling $T^2 = 1.3500$
F-value = 0.4426
p-value = 0.7230 (not significant)

From Table 4 it is apparent that there is no statistically significant difference in the vectors of means of the four groups with different lengths of service (less than three years and more than three years) in respect of the post-test scores: Hotelling’s $T^2=1.3500$, with an associated F-value of 0.4426 and degrees of freedom of 3 and 119. This F-value is statistically not significant ($p=0.7230$). Also the t-values in respect of the three variables are statistically not significant. The null-hypothesis is therefore not rejected. Accordingly there is no support for Hypothesis 4.

In order to determine whether the vectors of means of the post-test scores of the four groups with different lengths of service (less than three years and more than three years), differ statistically significantly, use was made of Hotelling’s $T^2$-test for independent samples. The results are given in Table 5:

<table>
<thead>
<tr>
<th>Variable</th>
<th>$X_1$</th>
<th>$S_1$</th>
<th>$N_1$</th>
<th>$X_2$</th>
<th>$S_2$</th>
<th>$N_2$</th>
<th>Levene F</th>
<th>DF</th>
<th>p(F)</th>
<th>t-value</th>
<th>DF</th>
<th>p(t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$X_1$</td>
<td>78,3065</td>
<td>15,7767</td>
<td>62</td>
<td>81,8936</td>
<td>13,1111</td>
<td>61</td>
<td>1.55</td>
<td>1 &amp; 121</td>
<td>0.2158</td>
<td>-1.34</td>
<td>121</td>
<td>0.1812</td>
</tr>
<tr>
<td>$X_2$</td>
<td>33,0484</td>
<td>12,2627</td>
<td>62</td>
<td>30,0164</td>
<td>12,0810</td>
<td>61</td>
<td>0.11</td>
<td>1 &amp; 121</td>
<td>0.7373</td>
<td>1.38</td>
<td>121</td>
<td>0.1698</td>
</tr>
<tr>
<td>$X_3$</td>
<td>28,1290</td>
<td>11,5098</td>
<td>62</td>
<td>27,6885</td>
<td>9,9407</td>
<td>61</td>
<td>4.44</td>
<td>1 &amp; 121</td>
<td>0.0372*</td>
<td>0.23</td>
<td>119</td>
<td>0.8206</td>
</tr>
</tbody>
</table>

Hotelling $T^2 = 2.7403$
F-value = 0.8983
df = 3 and 119
p-value = 0.4443 (not significant)
From Table 5 it is apparent that there is no statistically significant difference in the vectors of means of the groups with different lengths of service (less than three years and more than three years) in respect of the post-test scores. Hotelling's $T^2=2.7403$, with an associated F-value of 0.8983 and degrees of freedom of 3 and 119. This F-value is statistically not significant ($p=0.4443$). Also the t-values in respect of the three variables are statistically not significant. The null-hypothesis is therefore not rejected. Accordingly there is no support for Hypothesis 5.

In order to determine whether the vectors of means of the pre-test scores in respect of the measuring instruments, of subjects with different academic qualifications (secondary school matric level, and tertiary education) differ statistically significantly, use was made of Hotelling's $T^2$-test for independent samples. The results are given in Table 6:

**TABLE 6**

| MANOVA AND ASSOCIATED ANOVA S OF QUALIFICATIONS IN RESPECT OF PRE-TEST SCORES |
|---------------------------------|--------|---------|
| L Ratio | F | DF | P |
| 0,963246 | 0.74 | 6 & 236 | 0.6152 |
| X1 | 1,60 | 2 & 120 | 0.2057 |
| X2 | 1,47 | 2 & 120 | 0.2340 |
| X3 | 0,20 | 2 & 120 | 0.8181 |

From Table 6 it appeared that Wilks' coefficient lambda is equal to 0.963246, with an associated F-value of 0.74. This F-value with 6 and 236 degrees of freedom is statistically not significant ($p=0.6152$). No further statistical analyses were therefore undertaken. The null-hypothesis is not rejected. Accordingly there is no support for Hypothesis 6.

Similarly to determine whether there are differences in the vectors of means of the groups with different academic qualifications in respect of the post-test scores of variables X1, X2 and X3, use was made of multivariate analysis of variance (MANOVA). The results are given in Table 7:

**TABLE 7**

| MANOVA AND ASSOCIATED ANOVA S OF QUALIFICATIONS IN RESPECT OF POST-TEST SCORES |
|---------------------------------|--------|---------|
| L Ratio | F | DF | P |
| 0.915260 | 1.78 | 6 & 236 | 0.1038 |
| X1 | 0.13 | 2 & 120 | 0.8800 |
| X2 | 2.36 | 2 & 120 | 0.0989 |
| X3 | 0.36 | 2 & 120 | 0.6952 |

From Table 7 it appeared that Wilks' coefficient lambda is equal to 0.915260, with an associated F-value of 1.78. This F-value with 6 and 236 degrees of freedom is statistically not significant ($p=0.1038$). No further statistical analyses were therefore undertaken. The null-hypothesis is not rejected. Accordingly there is no support for Hypothesis 7.

**DISCUSSION AND CONCLUSIONS**

From the research results it would appear that staff members maintained relatively high levels of job satisfaction. The scores recorded, ranged between levels 5 and 6 on a seven point scale where 7 is considered high. Career aspirations, on the other hand, remained relatively low. The scores recorded ranged between 2 and 3 on a seven point scale where 7 is considered high. This aspect could be ascribed to the prevailing culture (ambition is regarded negatively), the age and length of service of the employees which could suggest that they may have aspirations other than progressing up the corporate hierarchy. Stress levels remained stable at a low level as reflected by the scores for the first and second test. The recorded scores ranged between levels 1 and 2 where, on a four point scale, 4 is regarded as high. Thus, the results recorded indicate that the restructuring process was not perceived as emotionally traumatic.

Because of the problematic nature of establishing a benchmark before the advent of restructuring, employees were tested immediately after the restructuring process was announced and before implementation commenced. The results of the research indicated no decline or increase in job satisfaction levels, career aspirations or stress levels, although a period of eight months elapsed before the second test was applied. The results provided no support for the expectation that after a time lapse the "emotional" effects of organisation restructuring would diminish and that workers would experience a greater degree of job satisfaction. In addition, it would appear that the time lapse did not improve workers' perceived prospects or that stress levels decreased.

**REFERENCES**


