

The impact of feedback on changing organisational culture

A. la Grange & D.J. Geldenhuys

ABSTRACT

Giving feedback on organisational culture is common practice in large South African organisations, but the value of the impact is seldom measured. The aim of this study was to determine the impact of feedback in terms of effecting changes in organisational culture. The empirical study described in this paper was conducted among employees of a South African financial institution by means of a one-group pre-test post-test design using the Corporate Culture Lite Questionnaire. The sample size for the pre-test and post-test measurement was 1 584 and 927 employees respectively. A total of 203 feedback sessions were facilitated in five business units after the pre-test measurement (using the survey feedback approach). The data from the two measurements were compared, using independent t-tests and p-values, to determine any areas of significant difference (both statistical and practical). The results indicate that, in one of the five business units, there was a practical significant difference between the two measurements of organisational culture on ten of the dimensions. This research therefore confirms that feedback has a limited impact on effecting organisational culture change. The article ends by making recommendations.

Key words: organisational culture, change, organisational culture change, feedback, survey feedback process, communication

INTRODUCTION

Given the link between culture and organisational effectiveness, the study of culture in organisations is important (Denison 1990; Gibson, Ivancevich & Donnelly 1991). Moreover, the culture of an organisation contributes to maintaining its strategic competitive advantage (Lado & Wilson 1994; Martins & Martins 2002). According to Alvesson (1993), the study of organisational culture can add value for the following two reasons:

Ms la Grange was a former master's student in Industrial and Organisational Psychology, University of South Africa. Dr Geldenhuys is a senior lecturer in the Department of Industrial and Organisational Psychology, University of South Africa. E mail: geldedj@unisa.ac.za; Annette.LaGrange@santam.co.za.

- Organisational culture is a means of promoting more effective managerial action.
- Culture is a point of entry for a broader understanding of, and critical reflection upon, organisational life and work.

Today's ever-changing world of work imposes changes in the performance required of organisations (Armstrong & Baron 1998; Maritz, as cited in Jacobs 2003) and, to remain competitive, organisations must now continuously improve their performance. The capacity to introduce new strategies and practices is therefore critical (Kotter & Heskett 1992). For this reason, many organisations embark on re-engineering or streamlining of processes, restructuring of the business and various other strategic change processes. When organisations adapt to changing circumstances (Maritz, as cited in Jacobs 2003) or implement changes in their strategies, it is important that they also implement corresponding changes in organisational culture, otherwise the strategy is likely to fail (Struwig & Smith 2002). According to Schein (1990), the probable reason why many organisational change initiatives fail is that organisations take no account of their culture. Detert, Schroeder & Mauriel (2000) agree with this view and state that a company's prevailing cultural characteristics may well inhibit or defeat a re-engineering effort before it even begins.

In order to improve or change the culture of an organisation, it is essential that the people in the organisation understand its current culture (French & Bell 1999). Feedback in the organisational context is therefore very important. In practice, feedback is usually given to organisational members that have participated in the measurement of the organisation's culture (French & Bell 1999). According to Cooke & Rousseau (1988: 268), feedback "not only facilitates the process of debriefing participants, but also involves them in discussion and interpretation of their profiles in comparison to those of other respondents".

According to Church, Margiloff & Coruzzi (1995), databased feedback is one of the most powerful and effective means of inducing positive change. Feedback can serve two purposes: promoting learning (informational value) and promoting effort (motivational value) on the part of the people receiving the feedback (Hollenbeck, Ilgen, Lepine, Colquitt & Hedlund 1998).

Although providing feedback on culture to employees of large organisations is an established practice in South Africa, there is often no attempt to measure the value of this feedback. No studies could be found in the relevant literature on the impact of feedback in terms of its ability to effect change in an organisational culture.

This study therefore aims to investigate the impact of detailed feedback on organisational culture change.

Changing organisational culture

Over the last two decades, a substantial body of research has accumulated regarding the nature and prevalence of organisational culture (Alvesson 1993; Denison 1990;

Gibson et al. 1991; Higgins & Mcallaster 2004; Kotter & Heskett 1992; Martins & Martins 2002, 2003; O'Reilly 1989; Ott 1989; Schein 1992; Struwig & Smith 2002; Schrodtt 2002; Stoner & Freeman 1989; Williams 2002), with many different (Bagraim 2001), ambiguous (Schein 1992) and even competing definitions (Barney 1996) emerging from the literature.

According to Gibson et al. (1991), culture can be compared to individual personality. The culture that a group learns over time is simultaneously a cognitive, behavioural and affective process (Schrodtt 2002) that is similar to the psychological activities or reactions of human behaviour, which comprise cognitive, affective and behavioural activities (Koortzen 2005).

In his definition, Ott (1989: 69) also refers to the role that individuals play in the formation of organisational culture, namely, that “organisational culture can be defined as a social force that controls patterns or organisational behaviour by shaping members’ cognitions and perceptions of meanings and realities, providing affective energy for mobilization, and identifying who belongs and who does not”.

Goffee & Jones (1998) agree with Ott (1989) and state that an organisational culture’s shared assumptions, beliefs and values can make the difference between commitment and disaffection as far as any individual is concerned. They further describe culture as the way things get done around here and as a common way of thinking which, in turn, leads to a common way of acting on the part of the people involved.

Hatch & Schultz (1997) indicate that organisational culture involves all organisational members and originates and develops at all hierarchical levels of the organisation.

Barney (1996) defines culture as a complex set of values, beliefs, assumptions and symbols that define the way in which an organisation conducts its business. He adds that the culture of an organisation can be a source of sustained competitive advantage if it is valuable, rare and imperfectly imitable.

Martins & Terblanche (2003) define organisational culture as the deeply seated (often subconscious) values and beliefs shared by the people in an organisation. Organisational culture is manifested in the typical characteristics of the organisation and therefore refers to a set of basic assumptions that worked so well in the past that they have been accepted as valid assumptions within the organisation. These assumptions are maintained in the continuous process of human interaction (which manifests itself in attitudes and behaviour); in other words, as the right way in which things are done or problems should be understood in the organisation.

According to Ahmed (1998), culture is the pattern of arrangement or behaviour that is adopted by a group as the accepted way of solving problems. Culture therefore includes all the institutionalised ways and the implicit beliefs, norms, values and premises that underline and govern behaviour.

Higgins & Mcallaster (2004) define organisational culture as the pattern of shared values and norms that distinguishes one organisation from another. These shared values and norms indicate what is important in the organisation and how things are done.

In comparing the different definitions of culture, it seems that Schein's (1992) definition includes the most important components. He defines culture as: "a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems".

Change from an organisational development (OD) perspective can broadly be divided into large-scale (or fundamental change) and smaller changes (or fine-tuning changes) (Goodstein & Burke 1991). French & Bell (1999) similarly distinguish between transformational change and transactional change in their description of the Burke-Litwin model for planned change.

Porras & Silvers (2000: 80) mention planned change, which usually occurs when change is triggered by an environmental shift that, once sensed by the organisation, leads to an intentionally generated response. A response of this nature represents planned change, and this type of change consists of four identifiable, interrelated components, namely: (1) change intervention that alters (2) key organisational target variables, which then impact (3) individual organisational members and their on-the-job behaviours, (4) resulting in changes in organisational outcomes.

Based on the foregoing discussion, changing the culture of an organisation can be regarded as a large-scale or transformational planned change process. This means that a person or group of people need to unlearn something and learn something new (Schein 2004), indicating that there is obviously a need for behavioural change. According to Thompson & Luthans (1990), culture can only be changed by changing the behaviour and attitudes of the individuals involved. This involves learning new sets of appropriate behaviours and changing the consequences, so that new behaviours are reinforced and undesirable behaviours have negative consequences.

Feedback

Feedback can be defined from the perspective of the individual (Vohra & Singh 2005) in terms of getting feedback on performance. It can also be defined from the perspective of a group in terms of the development of the organisation (French & Bell 1999). The latter is often linked to some or other organisational change programme.

From the perspective of the individual, feedback can be defined as a part of the communication process whereby a sender conveys a message to a recipient (Ilgen,

Fisher & Taylor 1979). The recipient's response to the message (in other words, the feedback) depends on his or her personal characteristics, the nature of the message and the characteristics of the feedback source.

Vohra & Singh (2005) define feedback as the information people give to the role incumbent about the incumbent's performance outcomes, behaviour patterns, competence, ideas and actions. West & Markiewicz (2004) agree with this definition and add that feedback needs to be given in a sensitive and constructive way. Hollenbeck et al. (1998) state that feedback has both informational value (in that it promotes learning) and motivational value (in that it encourages people to make more effort).

From the perspective of groups, feedback is well known in the organisational development (OD) literature. According to these authors, as one of the phases in an OD programme, feedback refers to returning the information (which was obtained and analysed during the earlier phases) to the client system (Cummings & Worley 2005; French & Bell 1999). This is a crucial stage in any change process or programme, since the client gets the opportunity to clarify and explore the information by asking questions and adding his or her perspective to the information (Cummings & Worley 2005; French & Bell 1999). The rest of the OD programme will also be structured around the outcome of the feedback session with the client, because the client needs to take ownership of the information; the client will then, with the assistance of the consultant, plan the change further in terms of specific interventions to address areas of concern.

According to the literature, feedback to individuals and groups has many benefits (Bailey & Fletcher 2002; Burke 1999; Hollenbeck et al. 1998; Jabri 2004; McAfee, Quarstein & Ardalan 1995; Passos & Caetano 2005; Steelman & Rutkowski 2004; Tourish & Robson 2003). For example, it helps individuals and teams in terms of their development, improves performance, motivates employees, and creates a forum for dialogue. Individuals and organisations function on the basis of the information that they receive (Fournies 2000). Given this relationship between information, presented as feedback, and organisational behaviour, it is evident that feedback has enormous potential as a possible tool in improving an organisation and in planning organisational change (Nadler 1977).

Feedback is also important in directing behaviour (Fournies 2000; London 2003; Steelman & Rutkowski 2004) by providing information to the people involved on whether or not they are meeting their goals (Harmon, Brown, Widing & Hammond 2002). Put very simply, feedback guides, motivates and reinforces effective behaviours and reduces or stops ineffective behaviours (London 2003). According to Harmon et al. (2002), feedback may also be important from a psychological point of view (for example, reduced tension and increased commitment).

In the literature, the benefits of giving feedback to individuals and groups are stated clearly and can be summarised as follows (Bailey & Fletcher 2002; Burke 1999; Hollenbeck et al. 1998; Jabri 2004; McAfee et al. Ardalan 1995; Passos & Caetano 2005; Steelman & Rutkowski 2004; Tourish & Robson 2003):

- There are potential benefits in terms of both individual and group development.
- Receiving in-depth feedback will help to make individuals more aware of the behaviour that is expected and rewarded by the organisation.
- Receiving feedback is associated with enhanced performance.
- Receiving feedback has informational value in that it encourages learning.
- Receiving feedback has motivational value in that it encourages people to make more effort.
- Receiving feedback helps individuals and groups to be better equipped for work change.
- The process of giving feedback promotes dialogue between group members and makes it easier to discuss differences.
- Receiving feedback serves to guide, motivate and reinforce effective behaviour and helps to eliminate ineffective behaviour.
- Giving feedback to teams in an organisation can help employees to perform better.

The benefit of feedback depends very much on how the feedback is delivered. Feedback is most effective in changing and reinforcing behaviour when it follows immediately after the behaviour (Harvey & Brown 2006; Ovando 1994; West & Markiewicz 2004). In the organisational setting today, however, this seldom happens, since feedback is usually given to employees during their annual appraisal (West & Markiewicz 2004). West & Markiewicz (2004) further advocate that feedback should be balanced in terms of negative and positive feedback.

It is thus evident that feedback is an important part of the communication process and has definite benefits for both the individual and the organisation. It is thus hypothesised that providing feedback on the culture of the organisation will impact positively on attempts to change that culture.

RESEARCH METHODOLOGY

Population and sample

The research was conducted among the employees of a financial institution in South Africa. The specific organisation is structured according to various business units, with specific subdivisions in each business unit. For both measurements (pre-test and post-test), the population consisted of all employees in the various business units, excluding employees in the support functions (namely, Human Resources,

Information Technology, Marketing and Finance). The business units that were included were Broker Services, Call Centres, Insurance Services, Specialist Portfolios and Business Support Services.

A convenient sampling approach was chosen for this research. The questionnaires were sent to all employees in the specific business units, and participation was voluntary.

The population for the pre-test measurement consisted of 2 228 people, with a response rate of 71.10%. A second measurement of organisational culture (post-test) was done two years later to determine whether there had been any changes in the culture. The population for this measurement consisted of 1 952 people, with a response rate of 47.49%. The pre-test and post-test response rates obtained in this study can both be regarded as more than acceptable (Sekaran 2000).

The population for both measurements consisted of males and females and represented the four racial groups, namely white, black, Asian and coloured.

The population for the feedback intervention was structured around the functional teams of the different business units according to the survey feedback approach (Harvey & Brown 2006). All members of the specific teams were invited to attend the feedback sessions, but the number of people who actually attended the sessions was dependent on work commitments (in that some people had to remain in the office so that business could still be conducted). A total of 203 feedback sessions were facilitated in the five business units, with the number of sessions per business unit linked to the number of teams in the specific business unit.

A summary of the descriptive statistics of the total sample for the pre-test and post-test is presented in Table 1, and the breakdown of the sample per business unit for the pre-test and post-test is reflected in Table 2.

Most of the respondents from the pre-test measurement were from the Insurance Services business unit (48.36%; N=766). The rest of the sample consisted of Broker Services (22.10%; N=350), Business Support Services (15.59%; N=247), Call Centres (10.10%; N=160) and Specialist Portfolios (6.94%; N=110).

Most of the respondents from the post-test measurement were from the Insurance Services business unit (36.89%; N=342). The rest of the sample consisted of Broker Services (27.40%; N=251), Business Support Services (23.84%; N=221), Call Centres (7.23%; N=67) and Specialist Portfolios (4.96%; N=46).

The breakdown of respondents per business unit is a reflection of the overall breakdown of staff per business unit at the time the study was undertaken.

Measuring instrument

The measuring instrument that was selected to describe the perceived culture from the employees' perspective was the Corporate Culture Lite Questionnaire (CCQ Lite). The CCQ Lite is based on the Corporate Culture Questionnaire (CCQ) that

Table 1: Descriptive statistics of the sample for the pre- and post-tests

Business Unit	Broker Services		Business Support Services		Insurance Services		Specialist Portfolios		Call Centres	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
N	350	251	247	221	766	342	61	46	160	67
Race										
White	270	201	149	71	488	225	38	28	88	38
Black	23	17	40	6	101	29	8	6	16	4
Asian	15	6	11	5	34	13	7	7	9	2
Coloured	40	25	46	20	129	69	8	5	46	23
Other		0		1		2		0		0
Missing	2	2	1	118	14	4	0	0	1	0
Gender										
Male	145	105	72	68	350	137	39	27	56	18
Female	205	146	175	153	416	205	22	19	104	49

Table 2: Business unit composition of sample for the pre- and post-tests

Business unit	Frequency		% of valid responses		Cumulative % of valid responses	
	Pre	Post	Pre	Post	Pre	Post
Broker Services	350	251	22.10	27.08	22.10	27.08
Business Support Services	247	221	15.59	23.84	37.69	50.92
Call Centres	160	67	10.10	7.23	47.79	58.14
Insurance Services	766	342	48.36	36.89	96.15	95.04
Specialist Portfolios	61	46	3.85	4.96	100.00	100.00
Total	1 584	927				

was developed over the course of several years in response to management's need for an easily usable instrument (Saville & Holdsworth 2000).

The CCQ was constructed through a top-down procedure. Based on considerable experience of psychologists' and sociologists' instruments in this field, as well as an examination of the literature, an overarching conceptual structure was derived. Twenty major dimensions of organisational culture (later amended to 21) were identified. These dimensions are important to organisations, and their significance

has been supported by empirical and theoretical research (Saville & Holdsworth 2000). Six different versions of the questionnaire were piloted among a total of 3 971 respondents from a variety of organisations of different sizes and involved a series of extensive item and statistical analysis. Factor analysis reduced the questionnaire to 126 items across 21 scales, with six items per scale (Roos 2005).

The questionnaire includes 69 questions, and responses are recorded using a five-point Likert scale, ranging from 'Strongly disagree' to 'Strongly agree'. The average completion time for the CCQLite is approximately 25 minutes.

The four principal domains (with dimensions) measured by the CCQ Lite are:

- Human performance domain, with the dimensions of 'concern for quantity', 'concern for quality', 'use of new equipment', 'encouragement of creativity', 'customer orientation' and 'commercial orientation'
- Human resources domain, with the dimensions of 'concern for employees', 'job involvement', 'concern for career development', 'emphasis on performance-related rewards' and 'concern for equal opportunities'
- Decision-making domain, with the dimensions of 'degree of formalisation', 'employee influence on decisions', 'decision-making effectiveness', 'concern for the longer term', 'environmental concern' and 'concern for safety'
- Relationships domain, with the dimensions of 'vertical relations between groups', 'lateral relations between groups', 'interpersonal cooperation', 'communication effectiveness' and 'awareness of organisational goals'.

Two dimensions of the CCQ Lite were not applicable for the purposes of this study and were therefore excluded from both measurements, namely, 'environmental concern' and 'concern for safety'.

Reliability studies (done on the CCQ) were carried out by identifying error of measurement in the form of inconsistencies that would not emerge if the test were reliable. The reliability of the questionnaire was found to be more than acceptable (Saville & Holdsworth 2000). Comprehensive data on the reliability of the CCQ Lite was being collected at the time of this study. The norm group consisted of managers and staff from a range of organisations in the financial services, transport, pharmaceutical, health and food industries. The exact structure of the standardisation sample group was not available (Roos 2005).

The reliability of the CCQ Lite scales was also determined for this study. Most of the reliability coefficients were acceptable to high, except for low reliabilities recorded for 'concern for quantity' and 'commercial orientation' in the Performance domain, and 'degree of formalisation' in the Decision-making domain. Reliabilities across the scales within the four domains ranged from 0.35 to 0.77 for the Performance domain, 0.72 to 0.78 for the Human Resources domain, 0.38 to 0.77 for the Decision-making domain and 0.66 to 0.81 for the Relationships domain. The reliability coefficients for

the dimensions of 'concern for quality' (0.35), 'commercial orientation' (0.38) and 'degree of formalisation' (0.38) were low, which should be taken into account in interpreting the data. This low reliability is possibly because the CCQ Lite has only three items per scale.

Three types of validity studies were conducted on the CCQ instrument, namely, face validity, content validity and construct validity (Saville & Holdsworth 2000). The face validity and content validity were found to be acceptable. The results in terms of the construct validity were supportive, and additional investigations in this research area are still to be carried out (Saville & Holdsworth 2000). Validity data for the CCQ Lite were also being collected at the time this study was undertaken, but there was already encouraging evidence for both the face and content validity of the instrument (Roos 2005).

Procedure

Data were collected by means of two measurements – a pre-test and a post-test. For the first measurement, the pre-test, the questionnaire (including a biographical section and explanation for completion) was distributed, in person and by mail, in an electronic format (on a diskette) to all staff in the business units involved. The questionnaire was accompanied by a covering letter, which explained the purpose of the questionnaire and indicated that participation was voluntary and that confidentiality was guaranteed. The data were analysed by management consultants Saville and Holdsworth.

Feedback was then given to the management team for each business unit and then down through the hierarchy of functional teams, using the survey feedback approach (Harvey & Brown 2006). Line managers and supervisors were involved where feedback was given to their teams, but it was the responsibility of one of the authors and four other organisational development consultants to give the feedback. During the feedback sessions, the people receiving the feedback were asked to help interpret the data and compile possible action plans for improvement. Lastly, plans were also made for giving feedback on the data to employees at the next level down.

The second measurement, post-test, was also collected electronically, but in the form of an Internet link that had to be accessed by the respondents. An e-mail was sent to every employee in the business units involved, explaining the purpose of completing the questionnaire and indicating that participation was voluntary. Confidentiality was once again guaranteed, and the researcher's contact details were also included so that respondents could raise questions or mention any uncertainties that they might have.

Statistical analysis

The data from the questionnaires were processed for both measurements (pre-test and post-test) by using the package Statistica (version 7). Descriptive statistics

(means, standard deviations and frequency tables) were first calculated for each dimension of the CCQ Lite for both the first and second measurements.

For the interpretation, the scores were considered by comparing them with a norm group (by transferring the raw scores to standard scores). A total mean score was then calculated for all items in each scale, after which the effect size was calculated to enable the researcher to determine whether there was a significant difference between the pre-test and the post-test and thereby prove or disprove the research hypothesis.

The data for the two measurements were then compared, using independent t-tests and p-values, to determine any areas of statistically significant differences. A big difference (high result) indicates either an improvement or deterioration in the organisation's culture, while a small difference (low result) indicates that there was either a small change or no change in the organisation's culture.

In order to determine the practical significance of difference between groups, the effect size is used to express the observed difference in standard deviation units. According to Cohen (1988), the d-value is significant where $d=0.2$ signifies a small effect, $d=0.5$ a medium effect and $d=0.8$ a large effect size. The effect size was therefore calculated for any possible areas of significant differences to determine the practical significance of these differences.

RESULTS

The overall organisational culture results for the research organisation will be discussed first, followed by a discussion of the results for each business unit.

When comparing the two measurements, there was an improvement in every scale of the CCQ Lite between the pre-test and the post-test, with the biggest (positive) difference recorded for 'customer orientation' (0.63) and 'concern for employees' (0.64). This may indicate an improvement in the organisation's overall culture (see Table 3).

Only five of the 20 t-tests did not result in statistically significant mean differences between the pre-test and post-test measurement (see Table 4). These were 'concern for quantity', 'concern for equal opportunities', 'degree of formalisation', 'lateral relations between groups' and 'communication effectiveness'. The other 15 t-tests resulted in statistically significant mean differences between the pre-test and post-test at either the 0.01 or 0.05 level (as indicated in Table 4).

Although 15 of the scales showed a statistically significant mean difference between the pre-test and post-test results, the d-values on all the scales were smaller than 0.5. The differences between the pre-test and post-test results were thus either very small or small, and it can therefore be said that there were no practical

Table 3: Organisational culture profile for the overall organisation

CCQ Lite dimensions	Pre-test N = 1 584		Post-test N = 927	
	Mean	Std Dev.	Mean	Std Dev.
Performance domain				
Concern for quantity	6.85	1.38	6.87	1.50
Concern for quality	6.78	1.56	7.11	1.50
Use of new equipment	6.36	1.58	6.74	1.61
Encouragement of creativity	7.01	1.76	7.44	1.70
Customer orientation	7.23	1.99	7.86	1.54
Commercial orientation	7.44	1.61	7.62	1.63
Human resources domain				
Concern for employees	6.60	1.87	7.24	1.60
Job involvement	7.00	1.94	7.55	1.77
Concern for career development	7.20	2.03	7.66	1.97
Emphasis on performance-related rewards	6.71	2.00	7.13	1.98
Concern for equal opportunities	5.82	1.98	5.97	1.95
Decision-making domain				
Degree of formalisation	6.49	1.68	6.51	1.71
Employee influence on decisions	6.97	2.05	7.15	2.05
Decision-making effectiveness	7.28	2.01	7.45	2.03
Concern for the longer term	7.11	2.08	7.72	1.81
Relationships domain				
Vertical relations between groups	6.30	1.79	6.48	1.80
Lateral relations between groups	6.09	1.82	6.21	1.90
Interpersonal cooperation	6.68	2.02	7.08	1.95
Communication effectiveness	7.64	2.04	7.74	1.99
Awareness of organisational goals	7.16	1.48	7.54	1.40

significant differences. It can thus be deduced that giving detailed feedback on the results of the first culture measurement did not have a significant impact on improving the organisation's culture. The analysis of variance test (ANOVA) was performed and confirmed the results obtained in the tests.

Table 4: Differences between pre-test and post-test measurements for the overall organisation

CCQ Lite dimension	t-value	p	df	d
Performance domain				
Concern for quantity	-0.42	0.678	2 509	0.02
Concern for quality	-5.18	0.000**	2 509	0.21
Use of new equipment	-5.81	0.000**	2 509	0.24
Encouragement of creativity	-5.91	0.000**	2 509	0.24
Customer orientation	-8.31	0.000**	2 509	0.34
Commercial orientation	-2.60	0.009**	2 509	0.11
Human resources domain				
Concern for employees	-8.73	0.000**	2 509	0.36
Job involvement	-7.04	0.000**	2 509	0.29
Concern for career development	-5.55	0.000**	2 509	0.23
Emphasis on performance-related rewards	-5.07	0.000**	2 509	0.21
Concern for equal opportunities	-1.89	0.058	2 509	0.08
Decision-making domain				
Degree of formalisation	-0.17	0.863	2 509	0.01
Employee influence on decisions	-2.03	0.042*	2 509	0.08
Decision-making effectiveness	-1.97	0.049*	2 509	0.08
Concern for the longer term	-7.42	0.000**	2 509	0.30
Relationships domain				
Vertical relations between groups	-2.41	0.016*	2 509	0.10
Lateral relations between groups	-1.62	0.106	2 509	0.07
Interpersonal cooperation	-4.87	0.000**	2 509	0.20
Communication effectiveness	-1.23	0.220	2 509	0.05
Awareness of organisational goals	-6.40	0.000**	2 509	0.26

* Statistically significant difference at the 0.05 level

** Statistically significant difference at the 0.01 level

Results per business unit

Broker Services

Most of the scales measured by the CCQ Lite improved between the pre-test and the post-test, with the exception of 'concern for quantity' (-0.09) and 'degree of

formalisation' (-0.05), which decreased only slightly (see Table 5). The biggest positive differences between the pre-test and post-test were on the scales of 'customer orientation' (1.58) and 'concern for career development' (1.44). This may indicate an improvement in the culture of the Broker Services business unit.

Table 5: Organisational culture profile for Broker Services

CCQ Lite dimensions	2003 N = 350		2005 N = 251	
	Mean	Std Dev.	Mean	Std Dev.
Performance domain				
Concern for quantity	6.85	1.43	6.77	1.50
Concern for quality	6.09	1.73	6.93	1.48
Use of new equipment	6.10	1.59	6.96	1.52
Encouragement of creativity	6.57	1.80	7.81	1.50
Customer orientation	6.07	2.36	7.65	1.66
Commercial orientation	7.55	1.57	7.83	1.60
Human resources domain				
Concern for employees	6.09	2.00	7.44	1.33
Job involvement	6.44	1.97	7.79	1.72
Concern for career development	6.81	2.04	8.26	1.67
Emphasis on performance-related rewards	6.23	1.97	7.33	1.90
Concern for equal opportunities	5.51	2.09	5.96	1.96
Decision-making domain				
Degree of formalisation	6.35	1.84	6.30	1.75
Employee influence on decisions	6.79	2.09	7.71	1.77
Decision-making effectiveness	6.81	2.12	7.69	1.87
Concern for the longer term	6.56	2.23	7.83	1.71
Relationships domain				
Vertical relations between groups	6.17	1.86	6.79	1.58
Lateral relations between groups	5.51	1.92	6.24	1.73
Interpersonal cooperation	6.09	2.15	7.22	1.91
Communication effectiveness	7.27	2.16	8.12	1.83
Awareness of organisational goals	6.71	1.68	7.80	1.33

All the t-tests, with the exception of ‘concern for quantity’ and ‘degree of formalisation’, resulted in statistically significant mean differences between the pre-test and post-test measurement at either the 0.01 or 0.05 level (as indicated in Table 6).

Table 6: Differences between pre-test and post-test measurements for Broker Services

CCQ Lite dimensions	t-value	p	df	d
Performance domain				
Concern for quantity	0.71	0.480	599	-0.06
Concern for quality	-6.27	0.000**	599	0.50
Use of new equipment	-6.64	0.000**	599	0.53
Encouragement of creativity	-8.90	0.000**	599	0.69
Customer orientation	-9.09	0.000**	599	0.71
Commercial orientation	-2.20	0.029*	599	0.18
Human resources domain				
Concern for employees	-9.29	0.000**	599	0.72
Job involvement	-8.71	0.000**	599	0.68
Concern for career development	-9.22	0.000**	599	0.71
Emphasis on performance-related rewards	-6.84	0.000**	599	0.55
Concern for equal opportunities	-2.70	0.007**	599	0.22
Decision-making domain				
Degree of formalisation	0.31	0.754	599	-0.03
Employee influence on decisions	-5.66	0.000**	599	0.46
Decision-making effectiveness	-5.21	0.000**	599	0.42
Concern for the longer term	-7.57	0.000**	599	0.60
Relationships domain				
Vertical relations between groups	-4.33	0.000**	599	0.35
Lateral relations between groups	-4.85	0.000**	599	0.39
Interpersonal cooperation	-6.61	0.000**	599	0.53
Communication effectiveness	-5.05	0.000**	599	0.41
Awareness of organisational goals	-8.53	0.000**	599	0.67

* Statistically significant difference at the 0.05 level

** Statistically significant difference at the 0.01 level

The following scales also showed a practical significant difference, with the effect sizes larger than 0.2 but smaller than 0.8, which can be classified as a medium effect on each of the scales: 'concern for quality' ($d=0.50$), 'use of new equipment' ($d=0.53$), 'encouragement of creativity' ($d=0.69$), 'customer orientation' ($d=0.71$), 'concern for employees' ($d=0.72$), 'job involvement' ($d=0.68$), 'concern for career development' ($d=0.71$), 'emphasis on performance-related rewards' ($d=0.56$), 'concern for the longer term' ($d=0.60$), 'interpersonal cooperation' ($d=0.53$) and 'awareness of organisational goals' ($d=0.67$).

Although the effect sizes for 'customer orientation' ($d=0.71$), 'concern for employees' ($d=0.72$) and 'concern for career development' ($d=0.71$) are classified as medium effect, it should be noted that a large effect size is considered to be ≥ 0.8 , and these three scales can therefore be considered to be close to a large effect.

The overall culture in Broker Services as a business unit thus improved, given that there was a practical significant difference between the results of the pre-test and post-test measurements. It can therefore be deduced that giving detailed feedback on the results of the first culture measurement did have an impact on improving the culture of Broker Services.

Business Support Services

Most of the scales improved from the pre-test to the post-test measurement, but there was a decrease (albeit small) on some of the scales. The biggest improvement was on 'emphasis on performance-related rewards' (0.30) (illustrated in Table 7).

Four of the t-tests resulted in statistically significant mean differences between the pre-test and post-test measurement (illustrated in Table 8). These were 'concern for quality' (0.05 level), 'use of new equipment' (0.05 level), 'concern for employees' (0.5 level) and 'concern for the longer term' (0.1 level).

Although four of the scales showed a statistically significant mean difference between the pre-test and post-test results, the d -values on all the scales were smaller than 0.5. There is thus only a very small to small difference between the pre-test and the post-test results, and it can therefore be said that there were no practical significant differences between the pre-test and post-test measurements. It can thus be deduced that giving detailed feedback on the results of the first culture measurement did not have an impact on improving the culture of the Business Support Services unit. It is important to note that the scores for the pre-test were quite high (ranging from 6.54 to 8.06), however, and that the possibility of improvement would therefore be low.

Call Centres

Most of the scales decreased between the pre-test and the post-test measurements, with the exception of two: 'degree of formalisation' and 'interpersonal cooperation'

Table 7: Organisational culture profile for Business Support Services

CCQ Lite dimensions	2003 N = 247		2005 N = 221	
	Mean	Std Dev.	Mean	Std Dev.
Performance domain				
Concern for quantity	6.92	1.35	7.02	1.43
Concern for quality	7.38	1.29	7.65	1.37
Use of new equipment	6.62	1.44	6.91	1.39
Encouragement of creativity	7.58	1.71	7.49	1.67
Customer orientation	7.72	1.57	7.96	1.39
Commercial orientation	7.58	1.61	7.56	1.67
Human resources domain				
Concern for employees	6.95	1.78	7.35	1.63
Job involvement	7.66	1.76	7.81	1.72
Concern for career development	7.79	1.79	7.97	1.90
Emphasis on performance-related rewards	7.04	1.96	7.34	2.03
Concern for equal opportunities	6.15	1.94	6.20	1.89
Decision-making domain				
Degree of formalisation	6.54	1.64	6.64	1.68
Employee influence on decisions	7.43	1.93	7.27	2.03
Decision-making effectiveness	7.72	1.89	7.67	1.96
Concern for the longer term	7.55	1.98	8.10	1.74
Relationships domain				
Vertical relations between groups	6.68	1.67	6.47	1.85
Lateral relations between groups	6.58	1.74	6.35	1.94
Interpersonal cooperation	7.23	1.89	7.26	1.97
Communication effectiveness	8.07	1.94	7.95	2.09
Awareness of organisational goals	7.62	1.29	7.70	1.49

(as illustrated in Table 9). It is important to take into account, however, the low reliability coefficient obtained for 'degree of formalisation' (0.38) in the interpretation of this score. A possible explanation for the lower score on the post-test might be the way in which the employees perceived the feedback session. According to Blanchard (1998), feedback can have either a negative or positive effect, depending on how it is

Table 8: Differences between pre-test and post-test measurements for Business Support Services

CCQ Lite dimensions	t-value	p	df	d
Performance domain				
Concern for quantity	-0.77	0.440	466	0.07
Concern for quality	-2.17	0.031*	466	0.20
Use of new equipment	-2.18	0.029*	466	0.20
Encouragement of creativity	0.55	0.585	466	-0.05
Customer orientation	-1.70	0.089	466	0.16
Commercial orientation	0.14	0.885	466	-0.01
Human resources domain				
Concern for employees	-2.56	0.011*	466	0.24
Job involvement	-0.96	0.339	466	0.09
Concern for career development	-1.05	0.295	466	0.10
Emphasis on performance-related rewards	-1.65	0.100	466	0.15
Concern for equal opportunities	-0.25	0.799	466	0.02
Decision-making domain				
Degree of formalisation	-0.65	0.518	466	0.06
Employee influence on decisions	0.88	0.378	466	-0.08
Decision-making effectiveness	0.31	0.755	466	-0.03
Concern for the longer term	-3.20	0.001**	466	0.29
Relationships domain				
Vertical relations between groups	1.29	0.197	466	-0.12
Lateral relations between groups	1.38	0.168	466	-0.13
Interpersonal cooperation	-0.15	0.879	466	0.01
Communication effectiveness	0.64	0.525	466	-0.06
Awareness of organisational goals	-0.63	0.527	466	0.06

* Statistically significant difference at the 0.05 level

** Statistically significant difference at the 0.01 level

delivered. Reactions to feedback differ from person to person, since feedback can arouse any of a range of feelings, from anxiety and fear to shame or satisfaction (Blanchard 1998). All these reactions to feedback are forms of resistance, and are used to shift the focus away from the individual to those giving the feedback, namely, the

medium or the instrument. This could lead to resistance from employees when they have to complete a similar survey in the future. They might either complete the survey from a more negative standpoint or even refuse to participate at all.

Table 9: Organisational culture profile for Call Centres

CCQ Lite dimensions	2003 N = 160		2005 N = 67	
	Mean	Std Dev.	Mean	Std Dev
Performance domain				
Concern for quantity	7.19	1.34	7.07	1.41
Concern for quality	6.99	1.49	6.67	1.74
Use of new equipment	6.34	1.81	6.01	1.89
Encouragement of creativity	6.91	1.87	6.70	2.06
Customer orientation	7.48	1.85	7.43	1.68
Commercial orientation	7.43	1.65	7.46	1.65
Human resources domain				
Concern for employees	7.13	1.69	6.73	1.87
Job involvement	6.78	2.07	6.58	1.86
Concern for career development	7.62	1.78	6.10	2.15
Emphasis on performance-related rewards	7.36	1.71	6.60	1.99
Concern for equal opportunities	6.59	1.75	6.04	1.89
Decision-making domain				
Degree of formalisation	6.55	1.64	6.72	1.62
Employee influence on decisions	6.62	2.00	5.96	1.97
Decision-making effectiveness	6.97	2.20	6.88	2.08
Concern for the longer term	7.03	2.14	6.96	2.10
Relationships domain				
Vertical relations between groups	6.01	2.00	5.45	2.07
Lateral relations between groups	6.31	1.92	5.97	1.94
Interpersonal cooperation	6.64	2.01	6.75	1.97
Communication effectiveness	7.48	2.12	6.91	1.88
Awareness of organisational goals	7.15	1.53	6.99	1.45

Four of the t-tests resulted in statistically significant mean differences between the pre-test and post-test measurements (as illustrated in Table 10). These were ‘concern for career development’ (0.01 level), ‘emphasis on performance-related rewards (0.01 level), ‘concern for equal opportunities’ (0.05 level) and ‘employee influence on decisions’ (0.05 level). When looking at the d-values, only ‘concern for career development’ resulted in a practical significant difference, with an effect size of -0.75, which can be classified as a medium effect.

Table 10: Differences between the pre-test and post-test measurements for Call Centres

CCQlite dimensions	t-value	p	df	d
Performance domain				
Concern for quantity	0.57	0.569	225	-0.08
Concern for quality	1.42	0.158	225	-0.21
Use of new equipment	1.21	0.229	225	-0.18
Encouragement of creativity	0.75	0.452	225	-0.11
Customer orientation	0.18	0.854	225	-0.03
Commercial orientation	-0.13	0.896	225	0.02
Human resources domain				
Concern for employees	1.55	0.122	225	-0.23
Job involvement	0.66	0.510	225	-0.10
Concern for career development	5.48	0.000**	225	-0.75
Emphasis on performance-related rewards	2.91	0.004**	225	-0.42
Concern for equal opportunities	2.08	0.039*	225	-0.30
Decision-making domain				
Degree of formalisation	-0.70	0.485	225	0.10
Employee influence on decisions	2.29	0.023*	225	-0.33
Decision-making effectiveness	0.28	0.780	225	-0.04
Concern for the longer term	0.25	0.806	225	-0.04
Relationships domain				
Vertical relations between groups	1.92	0.056	225	-0.28
Lateral relations between groups	1.20	0.231	225	-0.17
Interpersonal cooperation	-0.35	0.725	225	0.05
Communication effectiveness	1.91	0.057	225	-0.28
Awareness of organisational goals	0.75	0.45	225	-0.11

* Statistically significant difference at the 0.05 level

** Statistically significant difference at the 0.01 level

It can therefore be deduced that giving detailed feedback on the results of the first culture measurement did not have an impact on the improvement of Call Centre culture.

Table 11: Organisational culture profile for Specialist Portfolios

	2003 N = 61		2005 N = 46	
CCQ Lite dimensions	Mean	Std Dev.	Mean	Std Dev.
Performance domain				
Concern for quantity	5.87	1.69	5.70	1.58
Concern for quality	7.00	1.13	6.93	1.73
Use of new equipment	6.48	1.47	6.63	1.64
Encouragement of creativity	7.31	1.40	7.61	1.83
Customer orientation	7.07	2.01	7.61	1.67
Commercial orientation	8.00	1.45	7.50	1.66
Human resources domain				
Concern for employees	7.11	1.63	7.72	1.39
Job involvement	7.95	1.40	7.87	1.69
Concern for career development	7.39	1.94	7.80	1.82
Emphasis on performance-related rewards	7.49	1.62	7.37	2.09
Concern for equal opportunities	5.98	1.89	5.98	2.08
Decision-making domain				
Degree of formalisation	6.15	1.66	6.15	1.84
Employee influence on decisions	8.02	1.58	7.54	2.08
Decision-making effectiveness	8.00	1.75	7.57	2.36
Concern for the longer term	7.80	1.73	7.85	1.74
Relationships domain				
Vertical relations between groups	7.15	1.53	7.17	1.88
Lateral relations between groups	6.70	1.76	6.98	2.08
Interpersonal cooperation	7.66	1.48	7.15	1.83
Communication effectiveness	7.75	2.08	7.35	2.34
Awareness of organisational goals	7.66	1.11	7.33	1.38

Specialist Portfolios

In Specialist Portfolios, unlike the overall organisation, only some of the scales improved between the pre-test and the post-test results (as illustrated in Table 11). There was a decrease (albeit small) in the overall scores on half of the scales, while the other half increased from the pre-test to the post-test measurement.

Only one of the t-tests resulted in statistically significant mean differences between the pre-test and post-test measurement, namely, 'concern for employees' (0.05 level) (as illustrated in Table 12). The effect size for 'concern for employees' was

Table 12: Differences between pre-test and post-test measurements for Specialist Portfolios

	t-value	p	df	d
Performance domain				
Concern for quantity	0.54	0.590	105	-0.11
Concern for quality	0.24	0.814	105	-0.05
Use of new equipment	-0.51	0.608	105	0.10
Encouragement of creativity	-0.95	0.343	105	0.19
Customer orientation	-1.49	0.140	105	0.29
Commercial orientation	1.66	0.100	105	-0.32
Human resources domain				
Concern for employees	-2.01	0.047*	105	0.39
Job involvement	0.27	0.786	105	-0.05
Concern for career development	-1.11	0.269	105	0.22
Emphasis on performance-related rewards	0.34	0.734	105	-0.07
Concern for equal opportunities	0.01	0.989	105	0.00
Decision-making domain				
Degree of formalisation	-0.01	0.989	105	0.00
Employee influence on decisions	1.34	0.184	105	-0.26
Decision-making effectiveness	1.09	0.277	105	-0.21
Concern for the longer term	-0.13	0.896	105	0.03
Relationships domain				
Vertical relations between groups	-0.08	0.936	105	0.02
Lateral relations between groups	-0.73	0.464	105	0.14
Interpersonal cooperation	1.57	0.118	105	-0.31
Communication effectiveness	0.95	0.345	105	-0.19
Awareness of organisational goals	1.37	0.174	105	-0.27

* Statistically significant difference at the 0.05 level

0.39, however, which is classified as a small effect. It can therefore be deduced that giving detailed feedback on the results of the first culture measurement did not have an impact on improving the culture of Specialist Portfolios.

Insurance Services

Most of the scales improved between the pre-test and the post-test, with the exception of the following three: 'employee influence on decisions' (-0.07), 'decision-making effectiveness' (-0.14) and 'lateral relations between groups' (-0.06) (as illustrated in Table 13). The biggest difference between the pre-test and the post-test measurements was recorded for 'customer orientation' (0.51) and 'concern for employees' (0.48).

Nine of the t-tests resulted in statistically significant mean differences between the pre-test and post-test measurements at either the 0.01 or 0.05 level (as indicated in Table 14), namely: 'use of new equipment', 'encouragement of creativity', 'customer orientation', 'commercial orientation', 'concern for employees', 'job involvement', 'emphasis on performance-related rewards', 'concern for the longer term' and 'awareness of organisational goals'.

Although these scales showed a statistically significant mean difference between the pre-test and post-test results, the d-values on all the scales were smaller than 0.5. There is thus only a very small to small difference between the pre-test and post-test results, and it can therefore be said that there were no practical significant differences. It can be deduced, then, that giving detailed feedback on the results of the first culture measurement did not have an impact on improving the culture of Insurance Services.

DISCUSSION AND CONCLUSION

The aim of this research was to determine the impact of feedback in terms of its ability to effect change in organisational culture. For the overall organisation, as well as for Broker Services, there were significant differences between the pre-test and post-test measurements on most of the CCQ Lite dimensions, with the overall organisation showing differences on 15 of the 20 dimensions, and Broker Services showing differences on 18 of the 20 dimensions. The measurements for Insurance Services showed significant differences on nine of the 20 dimensions, while Business Support Services and Call Centres each showed differences on only four of the dimensions. The measurements for Specialist Portfolios showed significant differences on only one of the 20 dimensions.

When looking at the areas of practical significant differences in the measurements for the overall organisation, no differences were recorded for Business Support Services, Specialist Portfolios and Insurance Services. The measurements for Call Centres showed one area of practical significant difference, namely, 'concern for career development', while measurements for Broker Services resulted in practical

Table 13: Organisational culture profile for Insurance Services

CCQ Lite dimensions	2003 N = 766		2005 N = 342	
	Mean	Std Dev.	Mean	Std Dev.
Performance domain				
Concern for quantity	6.83	1.31	6.98	1.47
Concern for quality	6.84	1.49	7.00	1.45
Use of new equipment	6.39	1.56	6.63	1.71
Encouragement of creativity	7.02	1.71	7.25	1.69
Customer orientation	7.55	1.74	8.06	1.46
Commercial orientation	7.31	1.63	7.54	1.63
Human resources domain				
Concern for employees	6.57	1.82	7.05	1.68
Job involvement	7.02	1.90	7.35	1.75
Concern for career development	7.07	2.11	7.30	1.95
Emphasis on performance-related rewards	6.62	2.04	6.91	1.95
Concern for equal opportunities	5.68	1.94	5.82	1.98
Decision-making domain				
Degree of formalisation	6.57	1.63	6.58	1.67
Employee influence on decisions	6.90	2.07	6.83	2.12
Decision-making effectiveness	7.37	1.93	7.23	2.08
Concern for the longer term	7.19	1.99	7.53	1.81
Relationships domain				
Vertical relations between groups	6.24	1.72	6.38	1.77
Lateral relations between groups	6.10	1.71	6.05	1.93
Interpersonal cooperation	6.69	1.96	6.92	1.98
Communication effectiveness	7.69	1.96	7.55	1.94
Awareness of organisational goals	7.18	1.40	7.39	1.33

significant differences on 10 of the 20 dimensions, namely, 'concern for quality', 'use of new equipment', 'customer orientation', 'concern for employees', 'job involvement', 'concern for career development', 'emphasis on performance-related rewards', 'concern for the longer term', 'interpersonal cooperation' and 'communication effectiveness'.

Table 14: Differences between pre-test and post-test measurements for Insurance Services

CCQ Lite dimensions	t-value	p	Df	d
Performance domain				
Concern for quantity	-1.62	0.105	1106	0.11
Concern for quality	-1.69	0.092	1106	0.11
Use of new equipment	-2.34	0.020*	1106	0.15
Encouragement of creativity	-1.99	0.047*	1106	0.13
Customer orientation	-4.72	0.000**	1106	0.30
Commercial orientation	-2.20	0.028*	1106	0.14
Human resources domain				
Concern for employees	-4.19	0.000**	1106	0.27
Job involvement	-2.74	0.006**	1106	0.18
Concern for career development	-1.66	0.098	1106	0.11
Emphasis on performance-related rewards	-2.18	0.030*	1106	0.14
Concern for equal opportunities	-1.11	0.267	1106	0.07
Decision-making domain				
Degree of formalisation	-0.16	0.877	1106	0.01
Employee influence on decisions	0.52	0.602	1106	-0.03
Decision-making effectiveness	1.06	0.290	1106	-0.07
Concern for the longer term	-2.70	0.007**	1106	0.18
Relationships domain				
Vertical relations between groups	-1.19	0.235	1106	0.08
Lateral relations between groups	0.48	0.635	1106	-0.03
Interpersonal cooperation	-1.75	0.081	1106	0.11
Communication effectiveness	1.16	0.245	1106	-0.08
Awareness of organisational goals	-2.39	0.017*	1106	0.16

* Statistically significant difference at the 0.05 level

** Statistically significant difference at the 0.01 level

These findings suggest that feedback has an impact on changing organisational culture in certain situations, as confirmed by a study by Harmon et al. (2002) in which the authors argue that the benefit of feedback depends very much on how it is delivered. According to Blanchard (1998), receiving feedback can lead to different

reactions in different people. Feelings such as anxiety, fear, shame and dissatisfaction may be experienced by the people receiving the feedback, and these feelings need to be managed. It is recommended that line managers should be helped to understand how employees' perceptions of practices within the organisation (such as feedback) can have an impact on the organisation's performance. It should therefore become a business imperative to ensure that the organisation's culture is aligned with its business strategy.

A possible explanation for areas of no difference between the two measurements could be that employees do not trust the process of completing questionnaires. This could impact on how respondents complete the questionnaire and react to the feedback itself. If they do not feel that they derive any value from completing the questionnaire, or that nothing changes after they have given their input, they might not complete the questionnaire in a spirit of complete honesty. This is supported in the literature by Hartley (2001), who argues that if there seems to be no benefit from the survey, employees may start to distrust the process, which, in turn, may well have negative effects on future surveys carried out in the organisation. Confidentiality is another important consideration. If employees have reason to believe that the confidentiality of the survey will be compromised, they may very well choose not to be altogether honest in their responses (Hartley 2001).

The survey feedback process can be regarded as a powerful means of creating changes in an organisation. The results are more beneficial if the organisation involves all its employees. When survey feedback interventions are used in isolation, their success is usually short-lived. This success can become more substantial if the feedback is combined with other interventions. This is in line with Harvey & Brown's work (2006). It is therefore recommended that feedback interventions be combined and linked with other strategic business interventions in any efforts to successfully change the culture of an organisation.

A limitation of the study is the sample size of the post-test measurement, which was smaller than the sample size of the pre-test measurement. This may possibly be linked to the quality of the feedback and the changes resulting from the survey. If respondents experienced the feedback as negative or felt that the survey did not result in any change, they might choose not to participate in future studies of that nature. Another limitation is that, although the same population was used for both the pre-test and post-test measurements of organisational culture (the five business units), the actual sample of respondents between the two measurements differs.

No specific records were kept of employees attending the various feedback sessions. There is thus no way of knowing whether the employees who received feedback on the organisational culture (namely, the results of the pre-test) also participated in the post-test measurement.

A drawback of the one group pre-test-post-test research design is the possibility that other changes could have impacted on the results of the study before the post-test

measurement. According to Bless & Higson-Smith (1995), changes that can impact on such studies may occur either within the environment or within the subjects themselves.

The reliability coefficients of three of the dimensions of the Corporate Culture Lite Questionnaire were low, namely, 'concern for quantity' and 'commercial orientation' in the Performance domain, and 'degree of formalisation' in the Decision-making domain.

This study therefore has specific implications for future research. Firstly, it is recommended that organisations keep records of employees that attend feedback sessions to ensure that the same sample is used in the pre-tests and the post-tests. This will also enable the researcher to analyse the demographics of the sample. The standardisation of the feedback process is further recommended in an attempt to avoid differences that might impact on the results.

The practical implications of this study are that managers should be assisted in understanding how practices within an organisation, such as feedback, can have an impact on employees' perceptions of organisational performance. Furthermore, it is recommended that facilitators responsible for feedback be thoroughly trained in the process, including how to deal with the typical reactions of the people receiving the feedback. It is also recommended that feedback interventions be combined and linked with other strategic business interventions, thereby attempting to successfully change the culture of the organisation.

REFERENCES

- Alvesson, M. 1993. *Cultural Perspectives on Organisations*. Cambridge: Cambridge University Press.
- Ahmed, P.K. 1998. 'Culture and climate for innovation', *European Journal of Innovation Management*, 1(1): 30 43.
- Armstrong, M. & Baron, A. 1998. *Performance Management: New Realities*. London: Institute of Personnel and Development.
- Bagraim, J.J. 2001. 'Organisational psychology and workplace control: the instrumentality of corporate culture', *South African Journal of Psychology*, 31(3): 43 49.
- Bailey, C. & Fletcher, C. 2002. 'The impact of multiple source feedback on management development: findings from a longitudinal study', *Journal of Organizational Behavior*, 23(7): 853.
- Barney, J.B. 1996. 'Organizational culture: Can it be a source of sustained competitive advantage?' *Academy of Management Review*, 11(3): 656 665.
- Blanchard, K. 1998. 'Giving and receiving feedback', *Executive Excellence*, 15(10): 8.
- Bless, C. & Higson-Smith, C. (1995). *Fundamentals of Social Research Methods: an African Perspective* (2nd ed.). Cape Town: Juta.
- Burke, R.J. 1999. 'Managerial feedback, organizational values and service quality', *Managing Service Quality*, 9(1): 53 57.

- Church, A.H., Margiloff, A. & Coruzzi, C. 1995. 'Using surveys for change: an applied example in a pharmaceuticals organization', *Leadership and Development Journal*, 16(4): 3 11.
- Cohen, J. 1988. *Statistical Power Analysis for the Behavioural Sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Cooke, R.A. & Rousseau, D.M. 1988. 'Behavioral norms and expectations: a quantitative approach to the assessment of organizational culture', *Group and Organization Studies*, 13(3): 245 273.
- Cummings, J.G. & Worley, C.G. 2005. *Organization Development and Change* (8th ed.). Australia: Thomson, South-Western.
- Denison, D.R. 1990. *Corporate Culture and Organizational Effectiveness*. New York: Wiley & Sons.
- Detert, J.R., Schroeder, R.G. & Mauriel, J.J. 2000. A framework for linking culture and improvement initiatives in organizations', *Academy of Management Review*, 25(4): 850 863.
- French, W.L. & Bell, C.H. 1999. *Organization Development: Behavioral Science Interventions for Organization Improvement* (6th ed.). Upper Saddle River, NJ: Prentice Hall.
- Fournies, F.F. 2000. *Coaching Improved Work Performance*. McGraw-Hill: New York.
- Gibson, J.L., Ivancevich, J.M. & Donnelly, J.H. 1991. *Organizations: Behaviour, Structure, Processes* (7th ed.). Homewood, AL: Irwin.
- Goffee, R. & Jones, G. 1998. *The Character of a Corporation: how your Company's Culture Can Make or Break your Business*. New York: Harper Collins.
- Goodstein, L.D. & Burke, W.W. 1991. 'Creating successful organizational change', *Organisational Dynamics*, 19(4): 5 17.
- Harmon, H.A., Brown, G., Widing II, R.E. & Hammond, K.L. 2002. 'Exploring the sales manager's feedback to a failed sales effort', *Journal of Business and Industrial Marketing*, 17(1): 43 55.
- Hartley, J. 2001. 'Employee surveys: strategic aid or hand-grenade for organisational and cultural change?' *International Journal of Public Sector Management*, 14(3): 184 204.
- Harvey, D. & Brown, D.R. 2006. *An Experiential Approach to Organization Development* (7th ed.). Upper Saddle River, NJ: Prentice Hall.
- Hatch, M.J. & Schultz, M. 1997. Relations between organizational culture, identity and image', *European Journal of Marketing*, 31(5/6): 356 365.
- Higgins, J.M. & Mcallaster, C. 2004. 'If you want strategic change, don't forget to change your cultural artefacts', *Journal of Change Management*, 4(1): 63 73.
- Hollenbeck, J.R., Ilgen, D.R., Lepine, J.A., Colquitt, J.A. & Hedlund, J. 1998. 'Extending the multilevel theory of team decision making: effects of feedback and experience in hierarchical teams', *Academy of Management Journal*, 41(3): 269 282.
- Ilgen, D.R., Fisher, C.D. & Taylor, M.S. 1979. 'Consequences of individual feedback on behaviour in organizations', *Journal of Applied Psychology*, 64(4): 349 371.
- Jabri, M. 2004. 'Team feedback based on dialogue', *Journal of Management Development*, 23(2): 141 151.
- Jacobs, M. 2003. *Organisasiekultuur in die chemiese bedryf*, MA-verhandeling, Universiteit van Suid-Afrika, Pretoria.

- Koortzen, P. 2005. Trauma debriefing, outline presented in a classroom lecture at the University of South Africa, Pretoria.
- Kotter, J.P. & Heskett, J.L. 1992. *Corporate Culture and Performance*. New York: Free Press.
- Lado, A.A. & Wilson, M.C. 1994. 'Human resource systems and sustained competitive advantage: a competency-based perspective', *Academy of Management Review*, 19(4): 699 727.
- London, M. 2003. *Job Feedback: Giving, Seeking and Using Feedback for Performance Improvement*. London: Lawrence Erlbaum.
- Martins, E. & Martins, J. 2002. 'An organisational culture model to promote creativity and innovation', *South African Journal of Psychology*, 28(4): 58 65.
- Martins, E.C. & Terblanche, F. 2003. 'Building organisational culture that stimulates creativity and innovation', *European Journal of Innovation Management*, 6(1): 64 74.
- Martins, N. & Martins, E. 2003. 'Organisational culture', In Robbins, S.P., Odendaal A. & Roodt, G. (eds), *Organisational Behaviour: Global and Southern African Perspectives*, 379 400. Cape Town: Pearson Education.
- McAfee, B., Quarstein, V. & Ardalan, A. 1995. 'The effect of discretion, outcome feedback and process feedback on employee job satisfaction', *Industrial Management and Data Systems*, 95(5): 7 12.
- Nadler, D.A. 1977. *Feedback and Organization Development: Using Data-based Methods*. Reading, MA: Addison-Wesley.
- O'Reilly, C. 1989. 'Corporations, culture and commitment: motivation and social control in organizations', *California Management Review*, Summer: 925.
- Ott, J.S. 1989. *The Organizational Culture Perspective*. Pacific Grove, CA: Brooks/Cole.
- Ovando, M.N. 1994. 'Constructive feedback: a key to successful teaching and learning', *International Journal of Educational Management*, 8(6): 19 22.
- Passos, A.M. & Caetano, A. 2005. 'Exploring the effects of intragroup conflict and past performance feedback on team effectiveness', *Journal of Managerial Psychology*, 20(3/4): 231 244.
- Porras, J.I. & Silvers, R.C. 2000. 'Organization development and transformation', In French, W., Bell C.H. & Zawacki R.A. (eds), *Organization Development and Transformation: Managing Effective Change* (6th ed.), 80 97. Boston, MA: McGraw-Hill.
- Roos, W. 2005. The relationship between employee motivation, job satisfaction and corporate culture, Unpublished master's dissertation, University of South Africa. Pretoria.
- Saville & Holdsworth (SHL), 2000. *Corporate Culture Questionnaire Manual and User's Guide*. Surrey, UK: SHL.
- Schein, E.H. 1990. 'Organizational culture', *American Psychologist*, February, 109 119.
- Schein, E.H. 1992. *Organizational Culture and Leadership* (2nd ed.). San Fransisco, CA: Jossey Bass.
- Schein, E.H. 2004. *Organizational Culture and Leadership* (3rd ed.). San Fransisco. CA: Jossey Bass.
- Schrodt, P. 2002. 'The relationship between organizational identification and organizational culture: employee perceptions of culture and identification in a retail sales organisation', *Communication Studies*, 53(2): 189 202.

- Sekaran, U. 2000. *Research Methods for Business: a Skills Building Approach* (3rd ed.). New York: John Wiley and Sons.
- Steelman, L.A. & Rutkowski, K.A. 2004. 'Moderators of employee reactions to negative feedback', *Journal of Managerial Psychology*, 19(1): 6 18.
- Stoner, J.A.F. & Freeman, R.E. 1989. *Management* (4th ed.). Englewood Cliffs, NJ: Prentice Hall.
- Struwig, F.W. & Smith, E.E. 2002. 'The relationship between organisational culture and strategy formulation in South African firms', *South African Journal of Business Management*, 33(1): 21 29.
- Thompson, K.R. & Luthans, F. 1990. 'Organisational culture: a behavioural perspective'. In Schneider, B. (ed.), *Organizational Climate and Culture*. San Fransisco, CA: Jossey-Bass.
- Tourish, D. & Robson, P. 2003. 'Critical upward feedback in organisational processes: problems and implications for communication management', *Journal of Communication Management*, 8(2): 150 167.
- Vohra, N. & Singh, M. 2005. 'Mental traps to avoid while interpreting feedback: insights from administering feedback to school principals', *Human Resource Development Quarterly*, 16(1): 139 147.
- West, M.A. & Markiewicz, L. 2004. *Building Team-based Working*. USA: BPS Blackwell Publishing.
- Williams, R.S. 2002. *Managing Employee Performance: Design and Implementation in Organizations*. Australia: Thompson.