

THE RELATIONSHIP BETWEEN ORGANISATIONAL CULTURE AND EFFECTIVENESS IN THE WESTERN CAPE BANKING INDUSTRY

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ABSTRACT

This paper investigates the relationship between organisational culture and effectiveness in the Western Cape banking industry, beginning with an existing model and presenting a linked study. The study uses survey data from six organisations designed to test the applicability of the model in the context of the Western Cape banking industry. The results support Denison's findings, namely that organisational culture has a positive impact on effectiveness. The discussion includes several recommendations for future research.

INTRODUCTION

Organisations in many industries, such as energy, banking and electronics, have faced increasingly complex and changing environments brought about by deregulation, technological revolution, foreign competition and unpredictable markets. Key to the success of these organisations is the development of a particular culture for the organisation (Philip & McKeown, 2004:624–636). This consists of fostering attitudes of flexibility, dynamism and responsiveness; seeking structures and cultures that are positive and organic; and developing the human resource to its maximum capacity (Pettinger, 2000:227).

Organisational culture may be defined as “underlying values, beliefs and principles that serve as a foundation for an organisation's management system as well as the set of management practices and behaviors that both exemplify and reinforce those basic principles” (Denison, 1990).

The concept of organisational culture started to become popular in the 1980s. Organisational culture is said to mean, for example, an organisation's beliefs and values (Denison, 1990), an organisation's assumptions (Schein, 1992; Kotter & Heskett, 1992) or an organisation's understandings (Deal & Kennedy, 1982).

However, there was little consensus about definitions of organisational culture. Various authors adopted different approaches towards studying organisational culture. Schein (1992:17) identified three levels of organisational culture, namely artefacts, espoused values and underlying assumptions, from a visible to an invisible level. Handy (1993) related culture to the particular structure and design of an organisation. Culture can also be viewed from a more behaviour-oriented perspective, which is the most commonly used approach by researchers such as Denison (2003) and Peters and Waterman (1982). Hofstede (1980) recognised some basic dimensions associated with national and organisational culture, which denoted the difference between national cultural groupings and organisational culture that influenced organisation success.

A common hypothesis about the role of organisational culture is that, if an organisation possesses a “strong” culture exhibiting a well-integrated and effective set of specific values,

beliefs and behaviours, then it will perform at a higher level of productivity (Denison, 1984). Many research studies have provided evidence to confirm this hypothesis (Denison, 1984; Kotter & Heskett, 1992; Gordon & DiTomaso, 1992; Gerowitz, Lemieux-Charles & Heginbothan, 1996).

Organisational culture, in particular, was used to explain the success of Japanese companies over American organisations, through the development of a highly motivated workforce, committed to a common set of core values, beliefs and assumptions (Denison, 1984). While it has been suggested that culture accounts for the economic performance of various countries (Hofstede, 1980), the idea of organisational culture also serves to provide a basis for understanding the differences that may exist between successful companies operating in the same national culture (Schein, 1990).

Chan, Shaffer and Snape (2004) have suggested that organisational culture can be a valuable resource for companies, especially for service industries. Organisational culture has been assumed to have important implications, not only for the individual's affective reactions to organisational life, but also for organisational effectiveness (Schein, 1990; Gordon & DiTomaso, 1992; Denison & Mishra, 1989, 1995; Denison & Fey, 2003). A well-conceived and well-managed organisational culture closely linked to organisation success can also mean the difference between success and failure in the present demanding environment.

There is research to suggest that organisational culture can improve an organisation's ability to adapt the competitive environment, as well as to achieve high levels of performance and effectiveness. The intensification of research on organisational effectiveness has led to the recognition of several organisational factors that play an influential role in the determination of organisation performance (Marcoulides & Heck, 1993:81–94). Organisational culture has been recognised as one such factor, and has received much attention in the literature on organisational behaviour (Ouchi, 1981; Denison, 1984; Hofstede, 1986; Hofstede, Neuijien, Ohayv & Sanders, 1990; Schein, 1990; Gordon & DiTomaso, 1992; Denison & Mishra, 1989, 1995; Denison & Fey, 2003; Denison, Haaland & Goelzer 2003, 2004), because of the key role it plays in determining levels of organisational outcomes.

Peters and Waterman (1982), for example, held that successful organisations possess certain cultural traits of “excellence”. Ouchi (1981:1–10) pointed to a similar relationship between corporate culture and increased productivity, while Deal and Kennedy (1982:5–16) argued for the importance of a “strong” culture in contributing towards successful organisational effectiveness.

Denison, an influential researcher studying the relationship between organisational culture and effectiveness, together with his colleagues presented a series of papers and confirmed the impact of organisational culture on organisational effectiveness at macro level in a wide variety of industries in America, Russia, North America, Asia, Jamaica, Brazil, Australia, Canada, Japan, Europe-Mid-East-Africa (EMEA), and South Africa (Denison, 1984; Denison & Mishra, 1989, 1995; Denison & Fey, 2003; Denison, Haaland & Goelzer, 2003, 2004). This study made use of Denison's organisational culture framework and measurement instruments to examine whether there is a link between organisational culture and effectiveness in six banks (ABSA, Nedbank, Standard Bank, First National Bank, Capitec Bank and African Bank), which represent the Western Cape banking industry in South Africa, in order to provide additional evidence and deep understanding of this relationship within the South African context.

Against this background, the purpose of this research is to establish what the relationship between organisational culture and effectiveness in the Western Cape banking industry is. The research questions that drove this study were as follows:

- What are the characteristics of the organisational culture of the Western Cape banking industry?
- What are the specific strengths and weaknesses in the characteristics of the culture of the Western Cape banking industry.

- What is the relationship between Denison's four culture traits and effectiveness in the Western Cape banking industry?

The research further attempted to contribute to the existing literature on organisational culture and effectiveness. The results of this study on organisational culture suggest guidelines for South African banks on building organisational culture if a positive nexus exists between culture and effectiveness.

The remainder of the article is structured as follows: First, the extant literature on the relationship between organisational culture and effectiveness is reviewed. This is followed by a description of the research methods and procedures used in the study. The results of the study are then presented. The paper concludes with a discussion of theoretical managerial implications and directions for further research.

BRIEF LITERATURE REVIEW

The topic of culture and effectiveness is of central importance in organisational studies (Denison & Mishra, 1995:205). Researchers studying organisational culture have been addressing the links between organisational culture and effectiveness since the 1980s.

For example, Peters and Waterman (1982:2–6) held that a successful company often contains a characteristic of strong culture. Kilmann (1985:351–369) stated that, to perform well, companies must have adaptive cultures that contain a “risk-taking, trusting and proactive approach”. Furthermore, Gordon (1985:103–125) found out how organisational culture could impact on the performance of the banking and utilities industries. In addition, Barney (1986:656–665) suggested that organisational culture might impact on efficiency or effectiveness from an economic perspective. Saffold (1988:546–558), again, analysed organisational cultural traits and strengths, and developed a more sophisticated understanding of the relationship between organisational culture and performance.

In the 1980s, despite the claims about a link between organisational culture and effectiveness, few studies actually examined the existence and the nature of this relationship (Lim, 1995:16). This was possibly due to the following difficulties: the limited consensus regarding a general theory of organisational culture, whether culture could be “measured” in a way that allows one organisation to be compared with another, and the complexity in measuring effectiveness (Denison & Mishra, 1995:205).

In the 1990s and recent years, due to developments in the literature with regard to measurement instruments/models for both culture and effectiveness, researchers have developed certain theories of organisational culture and effectiveness. In the following sections, empirical studies that presented supporting evidence concerning organisational culture and effectiveness within various industries in the US and other countries are reviewed.

Denison and his colleagues have over the past 15 years developed a model from data gathered from more than 3 000 organisations and more than 100 000 respondents (Denison, 1984, 1990; Denison & Mishra, 1989, 1995; Denison & Fey, 2003; Denison, Haaland & Goelzer, 2003, 2004; Denison, Lief & Ward, 2004). This model describes a theory of organisational culture that is linked to organisational effectiveness, which is presented in Figure 1.

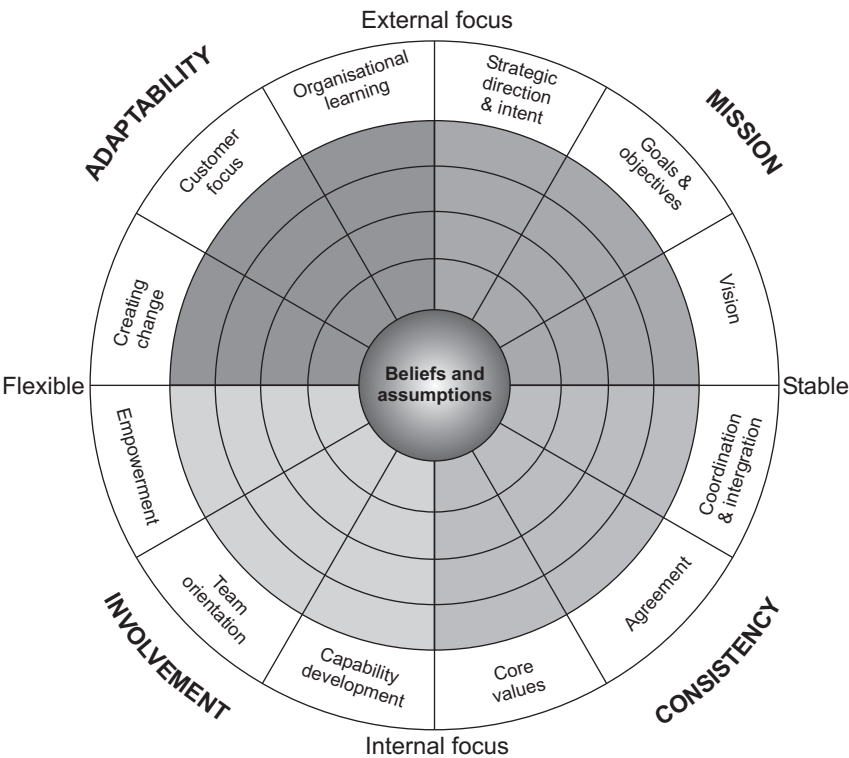


Figure 1 Denison’s organisational culture model (Denison & Fey, 2003:689)

At the centre of Denison’s organisational culture model are an organisation’s basic beliefs and assumptions. The model is based on four cultural traits, namely involvement, adaptability, mission and consistency, which are briefly described as follows (Denison & Fey, 2003:688):

Involvement

Involvement is one of Denison’s culture traits. This assessment will assist managers to find the level of an employee’s involvement in the management process. An organisation with a high level of employee involvement will develop the employee’s capability at all levels and create a sense of ownership, responsibility and loyalty toward the organisation. In the model, this trait is measured by the following three indices: empowerment, team orientation and capability development.

Consistency

This cultural trait asserts that an organisation with a strong and cohesive internal culture tends to be more efficient. Therefore, an organisation with high levels of consistency, conformity and consensus can easily achieve agreement among its members at all levels, even when they have different points of view on the difficult questions in the decision-making process. In the model, this trait is measured by three indices: core values, agreement, and coordination and integration.

Adaptability

This culture trait focuses on the organisation’s ability to adapt quickly to signals from the external environment, such as the demands of customers. An organisation with strong adaptability can translate those signals into internal behavioural changes, which will increase its chances of survival and development. In the model, this trait is measured by the following three indices: creating change, customer focus and organisational learning.

Mission

The culture trait of mission is utilised to examine whether an organisation has a clear sense of vision, strategic direction, goals and objectives. Furthermore, it also indicates whether all these statements are understood and shared among all the members in the organisation. Everyone in the organisation will utilise such mission statements as references in their everyday work. In the model, this culture trait is measured by the following three indices: vision, strategic direction and intent, and goals and objectives.

Denison and Mishra (1995:204–223) tested this four-trait culture model through a sample of 764 US organisations. The results showed consistent supporting evidence that Denison's four different cultural traits were positively related to several different subjective measurements of organisational effectiveness. The paper that resulted from the research pointed out that the two cultural traits of involvement and adaptability were strong indicators of growth, and the other two traits of consistency and mission were better predictors of profitability. The results also showed that, while the four cultural traits were strong predictors of subjectively rated effectiveness measurement criteria for all the sample organisations, they were strong predictors of objective effectiveness measurement criteria such as return on assets and sales growth only for large organisations.

Denison and Fey (2003:686–706) further utilised the model to test the relationship between organisational culture and effectiveness through a quantitative study of 179 foreign-owned firms operating in Russia. The results of the study showed a consistent and significant positive relationship between the four traits of organisational culture and effectiveness. In contrast to the US study, this paper showed that adaptability and involvement presented the strongest correlation with the effectiveness index of overall performance, profitability and product development; involvement and mission were well correlated with market share, sales growth, employee satisfaction, and quality. Mission was most highly correlated with effectiveness dimensions.

METHODOLOGY

The research population for the present study was the Western Cape banking industry, which comprises 12 banks in total (South African Banking Association). The researcher selected six banks from the Western Cape banking industry. The selected banks included ABSA Bank, African Bank, Capitec Bank, First National Bank, Nedbank and Standard Bank. These six banks represent more than 80% of the total market share in the banking industry (Banking Survey South Africa, 2004). The research assumption was that the selected six banks were representative of the Western Cape banking industry.

Non-probability sampling was considered to be an appropriate sampling design for the study. The reason for choosing this over probability sampling was due to cost, human resources and time. Emory and Cooper (1991:86) point out that probability sampling requires more planning and repeated follow-up phone calls to ensure that each member of the selected sample is contacted, and this can become expensive. The non-probability sampling technique therefore is more cost effective, requiring fewer human resources and less time. One type of non-probability sampling is purposive sampling (Cooper & Schindler, 2001:191).

The researcher used purposive sampling for the present study because the selected middle-level management employees (such as branch managers, sales managers and regional officers) in the six banks mentioned above were in a position to provide more accurate and valuable information on their organisation's culture and performance compared to lower-level employees, thus making it easier to answer the research questions of the present study (Sekaran, 2003:277).

An additional reason for selecting middle-level management employees as participants over lower-level ones related to whether they were familiar with the bank's performance in the banking industry as a whole. Most lower-level employees in banks are unfamiliar with the bank's performance regarding aspects like return on assets, profitability and sales/revenue growth.

A total of 103 questionnaires were distributed to six banks in the Western Cape on the basis of each individual bank's percentage of total assets (see Appendix 1). This method made it possible to reflect a reasonably sized sample from each bank in the Western Cape banking industry. The number of questionnaires distributed to each bank was as follows: Standard Bank – 41; ABSA – 21; FNB – 19; Nedbank – 18, African Bank – 2; and Capitec Bank – 2.

A total of 68 fully completed questionnaires were returned. The remaining 35 were either not returned or could not be utilised in the study as they were incomplete. A response rate of 66% was achieved. As confirmed by Sekaran (2003:295), sample sizes of between 30 and 500 subjects are appropriate for most research studies.

The purpose of this study was to investigate the existence of a possible relationship between organisational culture and organisational effectiveness. To assess this relationship, a survey questionnaire (see Appendix 2) was considered to be the appropriate method for data collection in this study.

The survey questionnaire was premised on Denison's Organisational Culture Survey (DOCS) as developed by Denison and Fey (2003), which is recognised as a reliable and valid research instrument for the study of organisational culture and effectiveness. This questionnaire has been utilised in the following academic studies: Denison & Mishra (1989,1995); Denison & Fey (2003); Denison, Haaland & Goelzer (2003, 2004). Denison, Janovics, Young & Cho (2006), which furthermore have provided a statistical validation of Denison's Organisational Culture Survey to measure organisational culture. Organisations from around the world have also applied this questionnaire to diagnose their own organisational culture and examine its impact of on effectiveness. This means that the questionnaire in question has previously been used by more than 3 000 organisations and more than 100 000 respondents worldwide (Denison, Lief & Ward, 2004:65).

The survey questionnaire in addition enables researchers to collect information for quantifying organisational culture and organisational effectiveness. Furthermore, as suggested by Denison and Fey (2003), the key strength of the survey technique has to do with the ability to study organisational culture by means of a method that can be applied to different organisations in the same way. The findings then provide a basis for comparison and generalisation.

A questionnaire with a covering letter describing the study and assuring confidentiality was personally taken to the branches or regional offices for the middle-level management employees to complete. Upon meeting these employees, the researcher also provided a verbal description of the project. Whenever possible, the employees completed the questionnaire at the time of the meeting.

However, in most cases they decided to complete the questionnaire later, and provided a specific time for the researcher to collect them –they generally needed one week.

If questionnaires were not ready at the specific time agreed on with the participants, an extensive follow-up procedure was undertaken, which included making three telephone calls at one-week intervals. The third telephone call was regarded as the final reminder for completing the questionnaire. The employees whose questionnaires were not returned by the end of this procedure were considered non-respondents.

After collection of the questionnaires from the participants in each bank, Cronbach's Alpha Reliability Coefficient was conducted, using the SPSS programme, to test reliability. The calculated coefficients were 0.823 for involvement, 0.808 for consistency, 0.731 for adaptability, 0.876 for mission, and 0.882 for effectiveness measures, which suggests strong positive item-homogeneity in this measuring instrument. This was significant as an indication of test reliability.

Denison's Organisational Culture Survey includes the following three sections: Section 1 – Biographical Questionnaire; Section 2 – Organisational Culture Questionnaire; and Section 3 – Organisational Effectiveness Questionnaire. Each section is explained below:

Biographical section

The biographical questionnaire includes the following two questions, which relate to personal information: “At which bank are you employed?” and “Which position do you hold at the bank?” The biographical questionnaire was used to confirm the respondents’ job positions, and all respondents named the bank at which they were employed.

Organisational culture section

The second section of the questionnaire is designed to measure the four existing critical organisational culture traits: adaptability, consistency, involvement and mission. Each cultural trait is further subdivided into three indices that manifest that particular cultural trait. Five questions are used to measure each culture index. The culture survey includes 60 questions, each with a five-point Likert scale with response categories ranging from 1 to 5, representing “strongly disagree”, “agree”, “neutral”, “disagree” and “strongly agree” respectively. (The Likert scale is named after Rensis Likert, who published a report (1932) describing its use. Provision N/A stands for a not-applicable response).

The results of this culture survey provide the basic cultural characteristics of the organisation. It makes it possible for an individual company to be compared with the best-performing as well as the worst-performing companies. The results of the survey reflect not only the difference in culture between company A and company B, but also indicate how each company measures up against the optimal business cultures of the highest-performing organisations.

Thirty-six statements were used to measure the different culture indices. Denison and Fey’s (2003:702–703) research also applied the same 36 statements in their organisational culture study in Russia. The selected 36 statements are regarded as appropriate and sufficient to identify and record the characteristics of organisational culture, and are reproduced in Appendix 2.

Organisational effectiveness section

Denison and Mishra (1995) measured organisational effectiveness subjectively with the use of seven questions, which measured the following dimensions: overall performance; market share; sales/revenue growth; profitability/return on investment; employee satisfaction; quality of products and services; and new product development. The responses to the seven questions were also scaled using a five-point Likert type rating scale with items ranging from 1 to 5 representing “low performer”, “below average”, “average”, “above average” and “high performer” respectively. The seven subjective effectiveness measuring criteria were seen as a set of operational norms that could reflect organisational business outcomes.

Previous empirical studies provided a good precedent for subjective effectiveness measurement to assess the relationship between organisational culture and effectiveness (Delaney & Huselid, 1996; Denison & Mishra, 1995; Denison & Fey, 2003). As stated above, subjective measures of organisational effectiveness are cost effective because such performance data can be collected through questionnaires or interview surveys that simultaneously elicit information on practices. It is also important to recognise that subjective measures, in practice, have tended to focus on overall performance, whereas objective measurement has typically used more specific financial indicators (Wall, Michie, Patterson, Wood, Sheehan, Clegg & West, 2004). This is a good reason why subjective measures of organisational effectiveness have been and will continue to be employed (Wall *et al.*, 2004).

RESULTS

Organisational culture

In order to assess the current culture characteristics for the Western Cape banking industry, the mean scores for the four cultural traits of mission, involvement, consistency and adaptability were calculated. They are graphically presented in Figure 2.

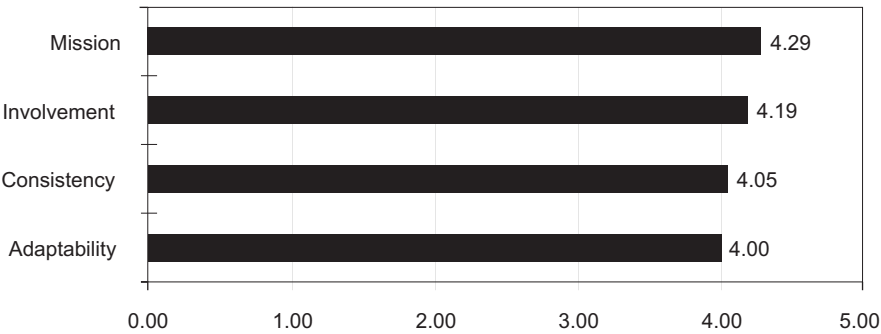


Figure 2 Mean scores on the four culture traits for the Western Cape banking industry

As shown in Figure 2, the mean scores for the four culture traits for the Western Cape banking industry range between 4.00 and 4.29. The mean score for mission was 4.29, with 4.19 for involvement, 4.05 for consistency, and 4.00 for adaptability. The mean score for mission is relatively higher than the mean scores for the other three culture traits. The ANOVA results demonstrated that the differences in the scores for the four culture traits are not statistically significant. (ANOVA is a statistical method for interpreting the mean scores.)

Organisational effectiveness

The results of the employees’ perceptions regarding the different aspects of organisational effectiveness are reported in this section. The level of effectiveness is indicated by the rating range of 0 to 5, with 5 indicating the highest-level score.

The mean scores for each aspect of the effectiveness measure for the Western Cape banking industry are summarised in Figure 3.

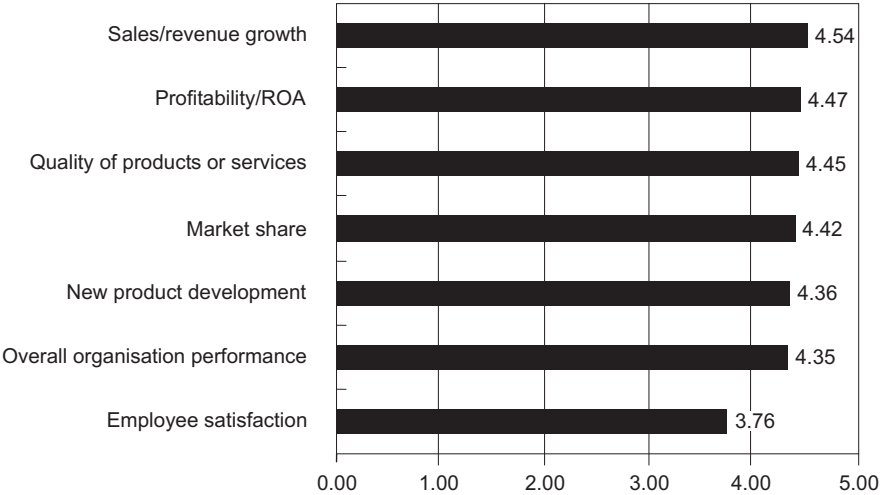


Figure 3 Mean score for each aspect of the effectiveness measure for the Western Cape banking industry

As illustrated in Figure 3, the mean scores for most aspects of the effectiveness measure are higher than 4.0. The only effectiveness aspect that scored lower than 4.0 is employee satisfaction. The ANOVA results demonstrate that the scored differences among the 12 culture indices are not statistically significant.

Organisational culture and effectiveness

The results for the correlation coefficients between four culture traits and seven subjective effectiveness measures are reported in Appendix 3.

As shown in Appendix 3 (row 2), the culture trait of involvement shows a positive impact on seven effectiveness measures. There is a significant positive correlation between involvement and employee satisfaction ($r = 0.89$, $p\text{-value} = 0.02$), with high levels of employee involvement in the management process associated with higher levels of employee satisfaction. There is also a significant positive correlation between involvement and profitability/ROA ($r = 0.81$, $p\text{-value} = 0.05$), with a high level of employee involvement in management processes associated with higher levels of profitability/ROA. Involvement also shows a high level of impact on overall performance ($r = 0.75$). In addition, involvement shows moderate correlations with quality of products/services ($r = 0.69$), market share ($r = 0.65$), sales/revenue growth ($r = 0.61$), and overall organisational performance ($r = 0.44$). The subjective measure of new product development is impacted by involvement at a relatively low level ($r = 0.37$).

Correlations with the different effectiveness measures for the culture trait of consistency (row 4) are relatively lower than the results of involvement, with “ r ” ranging from -0.05 to 0.76 . Consistent with the culture trait of involvement, different organisational effectiveness measures were also impacted by consistency at different levels.

For the culture trait of adaptability (row 6), a high correlation with new product development ($r = 0.78$) and a moderate correlation with quality of products/services ($r = 0.68$), market share ($r = 0.67$) and sales/revenue growth ($r = 0.57$) is shown. The subjective measure of profitability/ROA is impacted by adaptability at a low level ($r = 0.33$). Adaptability, however, seems to have an impact on employee satisfaction ($r = 0.03$) and overall performance ($r = -0.03$).

For the culture trait of mission (row 8), all the correlation coefficients are negative, with the exception of new product development ($r = 0.20$). The different organisational effectiveness measures were also impacted on by mission at various levels.

However, Appendix 3 shows that, with exception of the correlation between involvement and employee satisfaction, none of the other correlations have $p\text{-values}$ lower than 0.05 , and so none of the correlation coefficients are statistically significant at the 0.05 level.

The above results give rise to the following findings: Organisations in which members experience culture traits to a greater degree are likely to be more effective than those organisations where members experience culture traits to a lesser degree. However, the majority of the relationships are not statistically significant.

In addition, the results also indicate that the culture trait of involvement seems to be the most important determinant of effectiveness in the context of the banking industry in the Western Cape. Mission is the organisational cultural trait with the least associations with organisational effectiveness and even suggests negative impact.

The relationships between overall performance and organisational culture traits furthermore cannot be justified by this study. The other six aspects of the effectiveness measure are moderately impacted by the organisational traits.

Organisational culture indices and effectiveness

The correlation coefficients between the 12 culture indices and seven subjective effectiveness measures are presented in Appendix 4.

In total, 84 correlation coefficients were calculated to identify the impact of the 12 culture indices on the different aspects of the effectiveness measure. Out of the total of 84 correlation coefficients, 53 were positive and the remaining 31 negative. None of the negative correlations were statistically significant and only eight positive relationships were statistically significant with a $p\text{-value}$ less than 0.05 . All others $p\text{-values}$ were higher than 0.05 .

As shown in Appendix 4, the different culture indices also showed different levels of impact on the seven subjective effectiveness measures. The culture index of empowerment had the strongest positive impact on the different effectiveness measures. Four out of seven correlation coefficients

were statistically significant at the 0.05 level. This result seems to suggest that the success of an organisation in the Western Cape banking industry is driven by the concern to empower employees. The culture index of creating change also shows a high positive impact on the different aspects of organisational effectiveness (average $r = 0.80$). Consistent with the culture index of empowerment, four out of seven correlations were statistically significant (with a p-value less than 0.05).

Organisational culture traits and overall organisational performance

The results of the culture traits' correlation coefficients with all the aspects of the subjective effectiveness measure are summarised in Appendix 5. The culture traits of involvement, consistency and adaptability show a positive impact on the organisational performance, with "r" ranging from 0.471 to 0.767. The culture traits of involvement ($r = 0.767$) show the highest level of impact on organisational effectiveness. Both adaptability ($r = 0.504$) and consistency (0.471) show moderate correlation with organisational performance. However, the culture trait of mission shows a relatively low negative correlation, with organisational performance at -0.283 . The p-values demonstrate that none of the correlation coefficients are significant at the 0.05 level.

DISCUSSION

Organisational culture has been assumed to have important implications, not only for the individual's affective reactions to organisational life, but also for organisational effectiveness (Schein, 1990; Gordon & DiTomaso, 1992; Denison & Mishra, 1989, 1995; Denison & Fey, 2003). This study has investigated the relationship between organisational culture and effectiveness within the Western Cape banking industry.

SUMMARY OF FINDINGS

The finding that Denison's four organisational culture traits positively influence organisational effectiveness is supported by several previous research studies (Denison & Mishra, 1995; Denison & Fey, 2003; Denison, Haaland & Goelzer, 2003; Coffey, 2003).

Denison and Mishra (1995) provided empirical evidence of the positive relationships between the culture traits and effectiveness on the basis of a culture survey conducted in the US. Denison and Fey (2003) provided evidence in their Russian study. Denison, Haaland and Goelzer (2003) furthermore provided evidence in the instance of three regions, namely North America, Asia and Europe-Mid-East-Africa. Coffey (2003) confirmed the importance of organisational culture in determining organisational success in public-sector housing construction in Hong Kong.

However, in the current study, most of the statistical test results cannot confirm these positive relationships between organisational culture and effectiveness as these were not statistically significant. This could possibly be explained as being due to the limited sample used in the present study.

As suggested by Pallant (2005:127), determining of significance of "r" is a "very messy area, and should be treated cautiously. The significance of r is strongly influenced by the size of the sample. In a small sample (e.g. $N = 30$), you may have moderate correlation that does not reach statistical significance at the traditional $p < 0.05$ level. In large samples ($N = 100+$), However, very small correlations may be statistically significant".

Denison, Haaland and Goelzer (2003:220) have also pointed out limitations due to sample size in their Asian study, saying that "the small sample that is available shows the same pattern of results as the larger sample, but statistical significance is very low, and thus our confidence in these findings is compromised".

The research pointed to involvement and adaptability as the relatively important influential culture traits in determining effectiveness in the context of the Western Cape banking industry.

This finding is consistent with the findings of Denison and Fey's (2003) study in the context of Russia, where they (Denison & Fey, 2003:701) found that adaptability and involvement seemed to be the most important determinants of effectiveness. However, in contrast to the current study and Denison and Fey's Russian study, mission is identified as the organisational culture trait most highly associated with effectiveness in the US. With regard to the difference between Russia and the US, Denison and Fey (2003:701) interpreted this as due to differences in the economic environments of these two countries.

The economic environment is turbulent and unpredictable in Russia, so the ability to adapt to the changing environment is more important for companies. In contrast, the economic environment is more stable in the US, where mission appears to take on much greater importance. The above interpretation for Russia may apply in the current study, since South Africa is one of the countries experiencing a lot of change with regard to the economy and society. To this can be added that Coffey (2003:7) also found the culture traits of adaptability to have the strongest correlation with effectiveness in the context of Hong Kong.

Another interesting finding is that the culture index of empowerment showed the strongest correlation with effectiveness, especially with four out of seven correlation coefficients confirmed as statistically significant (sales/revenue growth, market share, profitability, and quality of products or services). The employees in the organisation with high levels of empowerment have the authority, initiative and ability to manage their own work (Denison, Haaland & Goelzer, 2003:208). This helps them to develop a sense of ownership and responsibility toward the organisation. In the context of South Africa, empowering employees with authority is one of the most important factors for an organisation's success. At the present time, human capital is becoming one of the most important resources of a company, so, if an organisation could empower its people, the employees will look after their organisations as their own. This kind of organisation will operate more efficiently. It will more easily gain competitive advantage and improve performance.

All in all, it is evident from the present study that organisational culture may indeed have a positive impact on organisational effectiveness. The present research discovered that there is a positive relationship between organisational culture and effectiveness in the Western Cape banking industry. Hence, the stronger the organisational culture, the greater the level of organisational effectiveness. The banking industry is an increasingly competitive environment and is therefore under constant pressure to manage its costs and to retain its employees. A well-conceived and well-managed organisational culture, closely linked to organisation success, can also mean the difference between success and failure in the present demanding environment.

MANAGERIAL IMPLICATIONS

The results of this study have important implications for the management of the Western Cape banking industry and other banks in the South African banking industry.

The results of the study suggest that management should realise the importance of organisational culture to the success of their organisation. They need to develop a better understanding of organisational culture concepts and should try to build a stronger organisational culture, which, in turn, would improve organisational performance and create a competitive advantage for their companies. The following specific recommendations should be considered:

- Firstly, performing an organisational culture evaluation using the same organisational culture survey to track progress should be an annual exercise.
- Adding more qualitative analysis to the study, for instance by including a comments and suggestions section to the questionnaire and interviewing employees, should be considered subsequently. This would help to understand organisational culture at a deeper level.

- In addition, implementing organisational culture development programmes at all levels in order to help employees to develop a better understanding of the importance of organisational culture and to foster a cohesive organisational culture would be of value.

RECOMMENDATIONS FOR FUTURE RESEARCH

In order to avoid the effect of under-representativeness and the consequent lack of significance derived from too small a sample, future studies should increase the size of the sample and include employees from different levels, if time and resources allow.

In the present study, only subjective measures were used as indicators of effectiveness and had their relationships examined against Denison's view of organisational culture. In the literature review, however, various views on the measurement of organisational culture and effectiveness were identified, and the use of objective measures was mentioned. Future studies could alternate some objective measures of organisational effectiveness and the different organisational culture concepts that were introduced.

In addition, future studies could incorporate qualitative research in order to understand organisational culture at a deeper level, seeing that the present study only used quantitative research methodology. The combination of quantitative and qualitative studies would help to create a better and deeper understanding of culture within organisations.

Furthermore, this study focused only on the Western Cape banking industry, therefore the results cannot be generalised to the national level. A future study on a larger institutional sample that includes a variety of organisations in different industries would provide more insight about the country's culture and its relationship to organisational performance. This could then be compared with the results of empirical studies in other countries.

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Appendix 1 Total assets percentage of individual bank

Bank	Total assets (R million)	Percentage of the total assets
Standard Bank	968 991	41%
ABSA	495 112	21%
FNB	442 388	19%
Nedbank	424 912	18%
African Bank	8 163	0.4%
Capitec Bank	125.1	0.01%

Source: Bank annual report, 2006

Appendix 2 Items and indexes for each trait

In this organisation . . .	1	2	3	4	5	N/A
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
Empowerment						
1. Decisions are usually made at the level where the best information is available						
2. Information is widely shared so that everyone can get the information he or she needs when it's needed						
3. Everyone believes that he or she can have a positive impact						
Team orientation						
4. Working in this organisation is like being part of a team						
5. This organisation relies on horizontal control and coordination to get work done rather than hierarchy						
6. Teams are the primary building blocks of this organisation						
Capability development						
7. The organisation is constantly improving compared with its competitors in many dimensions						
8. This organisation continuously invests in the skill of employees						
9. The capability of people in this organisation is viewed as an important source of competitive advantage						
Core values						
10. The leaders and managers follow the guidelines that they set for the rest of the organisation						
11. There is a clear and consistent set of values in this organisation that governs the way we do business						
12. This organisation has an ethical code that guides our behaviour and tells us right from wrong						
13. When disagreements occur, we work hard to achieve solutions that benefit both parties in the disagreement						
14. It is easy to reach consensus, even on difficult issues						

15. We often have trouble reaching agreement on key issues						
Coordination and integration						
16. People from different organisational units still share a common perspective						
17. It is easy to coordinate projects across functional units in this organisation						
18. There is good alignment of goals across levels of this organisation						
Creating change						
19. This organisation is very responsive and changes easily						
20. This organisation responds well to competitors and other changes in the business environment						
21. This organisation continually adopts new and improved ways to do work						
Customer focus						
22. Customer comments and recommendations often lead to changes in this organisation						
23. Customer input directly influences our decisions						
24. The interests of the final customer often get ignored in our decisions						
Organisational learning						
25. We view failure as an opportunity for learning and improvement						
26. This organisation encourages and rewards those who take risk						
27. We make certain that we coordinate our actions and efforts between different units in this organisation						
Strategic direction and intent						
28. This organisation has long-term purpose and direction						
29. This organisation has a clear mission that gives meaning and direction to our work						
30. This organisation has a clear strategy for the future						
Goals and objectives						
31. There is widespread agreement about goals of this organisation						
32. Leaders of this organisation set goals that are ambitious, but realistic						
33. The leadership has clearly stated the objectives we are trying to meet						
Vision						
34. We have a shared vision of what this organisation will be like in the future						
35. Leaders of this organisation have a long-term orientation						
36. Our vision creates excitement and motivation for our employees						

Organisational performance						
The following set of questions asks about the performance of your organisation. Compared to companies like yours, how would you assess your organisation's performance in the following areas?						
	1	2	3	4	5	Do not know
	Low performer	Below average	Average	Above average	High performer	
Sales/revenue growth						
Market share						
Profitability/ROA						
Quality of products or services						
New product development						
Employee satisfaction						
Overall organisation performance						

Appendix 3 Correlations between culture trait and organisational effectiveness

		Sales/revenue growth	Market share	Profitability/ROA	Quality of products or services	New product development	Employee satisfaction	Overall performance
Involvement	Pearson r	0.61	0.65	0.81*	0.69	0.37	0.89*	0.75
	p-value	0.20	0.16	0.05	0.13	0.48	0.02	0.09
Consistency	Pearson r	0.50	0.52	0.35	0.68	0.76	0.10	-0.05
	p-value	0.31	0.29	0.49	0.14	0.08	0.85	0.93
Adaptability	Pearson r	0.57	0.67	0.33	0.68	0.78	0.03	-0.03
	p-value	0.24	0.15	0.52	0.14	0.07	0.96	0.96
Mission	Pearson r	-0.12	-0.20	-0.35	-0.09	0.20	-0.65	-0.58
	p-value	0.82	0.71	0.49	0.87	0.71	0.16	0.23

* Correlation is significant at the 0.05 level (two-tailed)

Appendix 4 Correlations between culture indices and effectiveness

		Sales/revenue growth	Market share	Profitability/ROA	Quality of products or services	New product development	Employee satisfactions	Overall performance
Empowerment	Pearson r	0.87*	0.91*	0.89*	0.94*	0.74	0.77	0.65
	p-value	0.02	0.01	0.02	0.01	0.09	0.07	0.16
Team orientation	Pearson r	0.30	0.38	0.63	0.40	-0.01	0.86	0.73
	p-value	0.56	0.46	0.18	0.43	0.99	0.03	0.10
Capability development	Pearson r	0.48	0.46	0.67	0.52	0.26	0.77	0.65
	p-value	0.33	0.36	0.14	0.29	0.63	0.07	0.17
Core values	Pearson r	0.55	0.40	0.26	0.49	0.71	-0.14	-0.08
	p-value	0.26	0.44	0.61	0.33	0.11	0.80	0.88

Relationship between organisational culture and effectiveness in the banking industry

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Agreement	Pearson r	-0.22	-0.19	-0.25	-0.09	-0.02	-0.35	-0.36
	p-value	0.67	0.71	0.63	0.86	0.97	0.49	0.49
Coordination & integration	Pearson r	0.57	0.66	0.54	0.74	0.68	0.48	0.26
	p-value	0.23	0.15	0.27	0.09	0.13	0.34	0.62
Creating change	Pearson r	0.85*	0.93*	0.84*	0.96*	0.79	0.69	0.56
	p-value	0.03	0.01	0.04	0.00	0.06	0.13	0.25
Customer focus	Pearson r	0.07	0.07	-0.10	0.04	0.17	-0.36	-0.22
	p-value	0.89	0.89	0.84	0.94	0.75	0.48	0.67
Organisational learning	Pearson r	0.10	0.23	-0.23	0.24	0.54	-0.46	-0.55
	p-value	0.86	0.66	0.67	0.65	0.27	0.36	0.26
Strategic direction & intent	Pearson r	-0.27	-0.44	-0.38	-0.40	-0.23	-0.57	-0.36
	p-value	0.61	0.39	0.45	0.43	0.67	0.23	0.49
Goals and Objectives	Pearson r	0.00	-0.03	-0.17	0.09	0.27	-0.43	-0.41
	p-value	1.00	0.96	0.75	0.87	0.61	0.39	0.42
Vision	Pearson r	-0.01	0.01	-0.31	0.15	0.50	-0.60	-0.68
	p-value	0.99	0.98	0.55	0.78	0.32	0.21	0.14

* Correlation is significant at the 0.05 level (two-tailed)

Appendix 5 Correlation coefficients between organisational performance and culture traits

		Involvement	Consistency	Adaptability	Mission	Organisational culture
Organisational effectiveness	Pearson r	.767	.471	.504	-.283	.673
	p-value	.075	.346	.308	.587	.143

* Correlation is significant at the 0.05 level (two-tailed)