

# The impact of demographic variables on organisational culture and employee motivation: evidence from a health insurance company in Botswana

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## **Abstract**

Global changes impacting on the work environment including, increased competition and new technologies, are also felt in developing countries, but their impact has not been investigated to the same extent as in developed countries. The objective of this research was to investigate the impact of demographic variables on organisational culture and employee motivation in a health insurance company in Botswana that faced considerable competition because of environmental changes.

The Corporate Culture Questionnaire Lite and the Motivation Questionnaire were used to measure the two constructs and the impact of demographic variables on each construct. One hundred employees participated in the survey.

The results of the multivariate analysis of variance (MANOVA) indicated that age and education affect employees' perception of organisational culture. The results of the D-statistics further indicated significant

differences between employees from different educational levels and age groups in terms of their perceptions of organisational culture. Significant positive relationships were found between employees' motivation, their level of education and seniority, and a significant negative relationship was evident between employees' motivation and their length of service. The results indicate somewhat different results from similar studies in South Africa suggesting that the national cultures differ in the two countries.

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### Key phrases

*Botswana; demographic variables; employee motivation; health insurance; organisational culture*

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## 1. INTRODUCTION

Organisational culture serves as distinguishing factor between successful and unsuccessful companies (Cameron & Quinn 2011:4). It provides a potential source of sustainable competitive advantage and may be regarded as organisational capital (Crous & Scheel 2007:29). Organisational culture can be used to foster organisational commitment, convey a philosophy of management, rationalise and legitimate activity, facilitate socialisation and motivate employees (Ellson 2004:62).

Various authors elaborate on the relationship between corporate culture and employee motivation and the impact that these two constructs have on organisational effectiveness. Qayyum and Sukirno (2012:1), for instance, assert that employee motivation is a central concept in both the fields of organisational behaviour and human resource management. Motivation presents the key to organisational effectiveness and is a predictor of performance and job satisfaction (Ghafoor 2011:38; Manzoor 2012:39-40)

Employees at various organisational levels and with different earning power may, however, have different motivational values. Hence, what motivates employees at one level of an organisation may not motivate those at another (Islam & Ismail 2008:354). Hoole (2016:317) posits that differences in cultures may extend to motivation. Research supports this notion, for instance, that differences between self-oriented and collectivistic cultures will affect people's behaviour in meaningful ways. In her research, Close (2015:158) found that

generational cohorts are motivated differently by the integration of work and personal goals (integrated motivation) and by their perception that work is interesting and engaging (intrinsic motivation).

The demographic characteristics of employees play an important role in their perceptions of organisational culture (Helms & Stern 2001:426). Employees' perceptions of organisational culture, for instance, differ according to characteristics such as gender and age (Bellou 2010:13). Employees' values also change depending on their nationality, age and education level (Hofstede, Neuijen, Ohayv & Sanders 1990:312). In a study conducted in different branches of a hospital group (seen in its role as a service enterprise), Helms and Stern (2001:426) found that both the background of employees and their sectoral work experience affect organisational culture more than experience acquired in the workplace does.

Research in South African organisations illustrates the impact of particular demographic differences on organisational culture. Martins (2007:85), for instance, found that sub-cultures that were formed in various regions impacted on the way in which employees interpret and experience organisational culture. Findings from another study in a large South African manufacturing organisation suggest that Indian participants experience certain aspects of organisational culture more negatively than their white and African participants (Martins & Martins 2016:611).

In an empirical study, Islam and Ismail (2008:358) noted that the demographic factors of respondents such as their gender, age and education level might affect their preference in terms of particular motivating factors. Farooq and Ullah (2010:580) also noted the impact of demographic variables such as gender, marital status, education level, experience and age on people's behaviour when ranking motivational factors.

All in all, previous research suggests that demographic variables impact corporate culture and employee motivation. The question may be raised whether this trend also applies to Botswana, a developing country that may be characterised as having a collectivistic African culture. Botswana's society reflects a low level of individualism (Boateng, Molla & Heeks, as cited in Shemi 2013:44). This relates to a broader issue, namely whether employers in

Botswana experience similar challenges to South African employers, in a country corresponding to Botswana in terms of social-economic characteristics (Shemi 2013:xvi). Morahan, Rosen, Richman and Gleason (as cited in Pheko, Monteiro, Kote & Balogun 2013:399), for instance, suggest that existing organisational cultures in Botswana can be traced back hundreds of years to the upper middle class, white, Euro-American men who established them. They posit that work-related experiences in contexts such as Botswana might, consequently, be fairly unique.

## 2. ORGANISATIONAL CULTURE

Kelliher and Richardson (as cited in Horwitz & Kelliher 2015:5) identify a number of crucial variables that impact on the work environment including increasing competition, greater global integration, rapid information and communication technology (ICT) development and changes in employee demographics and attitudes. Increasingly competitive conditions require organisations to manage their resources more efficiently. An understanding of an organisation's culture, its level of diversity and its environment may assist in this regard.

Horwitz and Kelliher (2015:17) especially recommend theory building that explains conditions in particular regions or groups of countries. Phirinyane (2009:i) also points to unique conditions in particular countries. Certain developing countries, for instance, may employ similar reforms based on similar policies, but the outcomes may differ considerably because phenomena such as social and organisational culture differ across countries. Shemi (2013:218-219), for instance, identified differences in organisational culture in a sample of small to medium enterprises (SMEs) in Botswana relating to e-commerce adoption.

The participating company, a health insurance company in Botswana, faced a number of challenges, including rising operating costs and increased competition from existing and new entrants to the health insurance industry. Existing health insurance companies and new entrants eroded the company's market share and also threatened its continued access to lucrative government tenders. The company further had to deal with an escalating cost structure, largely due to rising medical claims. Bureaucracy and high administrative

overheads plaguing the health insurance industry further inflate the cost structures of health insurance companies (Geyman 2004:51).

It is evident from challenges such as those outlined above that the business environment in which organisations in Botswana operate has become increasingly complex. Changes in the business environment resulted in opportunities for creating value shifting from managing tangible assets to managing intangible assets (Kaplan & Norton 2001:93).

Organisations are unlikely to be effective in the new landscape if their organisational culture is not adapted to environmental factors (Bartram, Robertson & Callinan 2002:9; Martins & Martins 2002:63). This study investigates two intangible assets that have been linked to organisational effectiveness, namely corporate culture and employee motivation, and how demographical variables may influence them in the context of a Botswanan organisation.

Insight into employee motivation and corporate culture is gaining importance because of the rapidly changing nature of organisations. As mentioned earlier, most organisations have to deal with constant product and technological changes, global competition and demographic changes (Kirkpatrick, as cited in Kamau 2015:1777). A further challenge is to retain core employees. Human capital as a strategic resource fulfils a crucial role in organisational survival (Armstrong, as cited in Kamau 2015:1777). The influence of corporate culture on employee motivation and consequently organisational effectiveness is illustrated by Berry (2004:71) who emphasises that corporate culture “drives employee actions, including behaviours regarding health, safety and environmental practice”. Melewar, Karaosmanoglu and Paterson (2005:59) further state that corporate culture can boost employee motivation.

Despite the substantial body of theory and research that emphasises the importance of corporate culture and employee motivation in organisations, there appears to be limited scientific evidence on the relationship between these two concepts and the possible impact of demographic factors. Knowledge about the impact of corporate culture on employee motivation further typically tends to be experiential and anecdotal, and not research-based (Silverthorne 2005:98).

Considering the differences identified above, the main focus of this study is to investigate the impact of gender, age, education, seniority and years of service on organisational culture and employee motivation in a Botswanan health insurance organisation.

Martins and Martins (2016:619) explain that each individual arrives at an organisation with a set of values, attitudes and expectations. It is thus important that an organisation hires employees whose values aligns with those of the organisation. They furthermore explain that hiring employees whose values do not align with those of the organisation is likely to lead to a lack of motivation and commitment and dissatisfaction with the job and the organisation (Martins & Martins 2016:631). Culture is often viewed in cognitive terms, as a set of shared meanings.

This process is summarised as the indoctrination and socialising of new employees to management or the founders' way of thinking and feeling. Finally, the founders' own behaviour acts as a role model that encourages employees to identify with them, thereby internalising their beliefs, values and assumptions (Martins & Martins 2016:616). Some cultural differences that are evident between developed and developing countries include people in developing countries tending to be more collective than those in developed countries, power distances that are more obvious in many developing countries, and the trend that people are more aversive to uncertainty and risk in some developing countries (Punnett, Ford & Jönsson 2009:5).

The manner in which corporate culture influences employee motivation can be summarised by the relationship between organisational values and employee needs. The motivational sequence is activated by the emergence of employee needs which motivate an employee to take action towards need satisfaction. On the cognitive level, employees' needs transform into values that serve as the cognitive representation and transformation of needs. Therefore it is important that the organisational values are aligned to employee needs in order to ensure organisational effectiveness (Jackalas 2012:84; Martins & Martins 2016:620). For the purpose of this study, the concepts of organisational culture and corporate culture are viewed as similar constructs. Saville & Holdsworth (2000:7) defines corporate culture from the perspective of values as "an organisation's dominant system of beliefs and practices".

Nkomazana, Mash and Phaladze (2015:1) determined the personal values of primary health care workers in two Botswanan health districts, as well as their views about the organisational culture of the district health services. The researchers point out that the exceedingly negative experiences that they identified among health care workers may lead to reduced motivational, job satisfaction and productivity levels and increased employee turnover.

Nkomazana *et al.* (2015:8) further found that primary health care workers believed that the organisational culture characterising the two districts generally limited organisational effectiveness. The changes that participants expected in terms of suitably transformed organisations and the relationship between these expectations and their personal attributes corresponded to existing knowledge in the fields of organisational culture and leadership styles and how these concepts relate to employee satisfaction, organisational commitment and retention.

All in all, differences in corporate culture and employee motivation account for variances in organisational effectiveness (Roos & Van Eeden 2008:54). Jackalas (2012:3) summarised existing research by stating that employee motivation is a manifestation of corporate culture and that corporate culture has a strong influence on employee motivation. Berry (2004:71) highlights the influence of corporate culture on employee motivation and, consequently, on organisational effectiveness by emphasising that corporate culture “drives employee actions, including behaviours regarding health, safety and environmental practice”.

### **3. EMPLOYEE MOTIVATION**

Although motivation received considerable research attention in the developed world, it has not yet been investigated to the same extent in cross-country research (Punnett *et al.* 2009:9). According to Colquitt, LePine and Wesson (2010:112), motivation can be defined as a set of energetic forces that originates both inside and outside of an employee, initiates work-related effort and determines its direction intensity and persistence. They conclude that motivation has a strong relationship with job performance and a moderated positive relationship with organisational commitment.

There are a number of additional reasons why management should concern itself with employee motivation. Motivation can be linked to a profitable organisation, or to greater flexibility in adapting to changes that will enhance profitability. According to Mullins (2010:257), motivation is the best possible preventive for constructive behaviour or frustration (aggression, regression, fixation and withdrawal).

Motivation, however, is a complex construct that is shaped by numerous intrinsic and extrinsic factors (Bonenberger, Aikins, Akweongo & Wyss, as cited in Nkomazana *et al.* 2015:2). Roos and Van Eeden (2008:55) describe employee motivation as “an innate force shaped and maintained by a set of highly individualistic factors that may change from time to time, depending on the particular needs and motives of an employee”.

Certain needs and motives as experienced by employees, including the need for achievement and power, and the extent to which they are motivated by a competitive environment, provide an indication of their energy and dynamism at work. Roos & Van Eeden 2008: 55-56). The synergy between employees’ motivational drive systems and the features of their job environment provides a further dimension of motivation, including the degree to which interaction at work and praise and recognition motivate them, and whether constant opportunities for growth and development are important to them.

Intrinsic motivation typically refers to motivation that is supported by features such as meaningful and stimulating work, flexibility and sufficient autonomy. Employee needs for benefits such as financial reward, sufficient prospects for promotion and an acceptable status level typically represent the extrinsic dimension of motivation (Roos & Van Eeden 2008:55-56).

Finally, knowledge about employee motivation can enhance the effective utilisation of human resources. Motivation can also be linked to a profitable organisation or greater flexibility in adapting changes that will enhance profitability (Jackalas 2012:52). An organisation’s performance often depends on what Dieleman, Toonen, Touré and Martineau (as cited in Heidarian, Kelarijani, Jamshidi & Khorshidi 2015:170) term “the available human resource mix” and their motivation.



## 4. OBJECTIVES OF THE RESEARCH

The main focus of the research was to investigate the impact of demographic variables on organisational culture and employee motivation in a Botswanan health insurance organisation. The first step in the research process was to confirm the reliability of the two measuring instruments.

## 5. RESEARCH METHODOLOGY

### 5.1 Participants and setting

The participants were a sample of 100 out of a total population of 106 employees of a Botswanan health insurance organisation. The aim was to involve all employees in the survey but unfortunately six were not available during the survey period.

Table 1 provides the distribution of participants according to their demographic variables.

Table 1 show that the greatest portion of the sample (76%) was younger than 40 years and the majority (67%) was female. It is evident from this table that just over half of the participants (57%) had been employed by the organisation for fewer than five years. Nearly half (47%) of the participants had a degree and the majority (82%) of participants did not occupy managerial positions.

**TABLE 1: Distribution of participants according to demographic variables**

Demographic variable	N
<b>Age</b>	
<30 years	36
31 – 40	40
41 – 50	24
Total	100
<b>Gender</b>	
Male	33
Female	67
Total	100

Length of service	
0 – 6 years	57
7 – 10 years	32
10 years <	11
Total	100
Education level	
Grade 12 (O" level) and below	16
Post-matric certificate (diploma)	37
Degree	40
Postgraduate	7
Total	100
Seniority	
Staff	82
Managers	18
Total	100

Source: Calculated from survey results

## 5.2 Measuring instruments

The Corporate Culture Questionnaire Lite (CCQL) and Motivation Questionnaire (MQ) were used to measure corporate culture and employee motivation respectively (Saville & Holdsworth 2000). Data on corporate culture were collected by means of a paper-and-pencil questionnaire (the CCQL), whilst data on employee motivation were collected from respondents by means of a web-based questionnaire (the MQ).

The CCQL comprises 23 scales based on a model that recognises 23 major cultural scales categorised along four principle domains of corporate culture, namely the *performance*, *human resource*, *decision-making* and *relationship* domains. Each of the domains comprises between five and seven scales with raw scores ranging between 1 and 15. The lowest possible score indicates strong disagreement with the particular dimension of corporate culture while the highest score indicates strong agreement with the particular dimension. Results from the initial trial (N=274) in the development of the questionnaire indicated that the alpha coefficients of the various scales ranged from 0.72 to 0.89 (Saville & Holdsworth 2000).

The MQ, the instrument used to measure employee motivation, was developed in the United Kingdom. An item analysis showed that all scales had high internal consistency reliabilities ranging between 0.70 and 0.84 (Saville & Holdsworth 2000). The lowest possible score per item of an MQ scale indicates that the particular scale does not hold considerable motivational value for the person, and may even reduce the person's level of motivation. The highest possible score indicates that the particular scale holds considerable motivational value for the person. The MQ assesses the dimensions *energy and dynamism*, *synergy*, *intrinsic motivation*, and *extrinsic motivation*. The MQ questionnaire uses a five-point Likert response scale. Each of the eighteen categories consists of eight items, with a total of 144 items that are completed on custom-designed computer reading sheets.

The following steps were followed in distributing and collecting completed questionnaires:

- obtaining senior management's approval for undertaking the research in the organisation
- scheduling a briefing session in which the aim and rationale for the study was explained.

During this briefing, participants were informed that their participation in the research was voluntary and that anonymity was assured.

- forwarding the link for completing the web-based MQ to all employees.
- inviting all employees via e-mail to participate in the paper-based CCQL questionnaire

Data collection took place over a period of two months. Permanent employees were divided into a number of groups and invited to complete the CCQL on scheduled days, and the electronic link to complete the MQ was sent directly to all permanent employees. This ensured a high a response rate.

### 5.3 Data analysis

The results were interpreted on the basis of analysis of the total sample and its demographic segments based on gender and education level, as well as length of service, age and

seniority. The Cronbach alpha reliability coefficient was used to calculate the internal consistency reliability of both the MQ and the CCQL.

To determine whether there were any statistically significant differences in the vector of the factor means of groups created in terms of demographic variables, the multivariate analysis of variance (MANOVA) was performed for the demographic variables, namely gender, seniority, age, education and length of service. The significance levels (p-value) of 0.05 and 0.01 were used.

According to Thompson (2004:609), tests of significance should be accompanied by effect size statistics which approximate the practical importance of differences between the means. Thompson (2004:612) further states that statistical significance tests yield small p-values as the size of the data set increases. Practical significance tests offer the advantage that they are independent of sample size (Terre Blanche & Durrheim 1999:351; Thompson 2004:608)

Statistical significance therefore means that the observed mean differences are not likely to be due to sampling error, while practical significance considers whether the difference is large enough to be of value in a practical sense (Thompson 2001:83; Thompson 2004: 612). In this study, effect sizes between groups were computed by means of Cohen's D-statistic. An effect size (d) of 0.2 is considered small, 0.5 is considered medium and a D-statistic of 0.8 or higher is considered large (Cohen 1988:25-26).

## 6. FINDINGS

### 6.1 Descriptive statistics for the study variables

Results for the CCQL indicated that its mean scores ranged from 7.09 to 11.94. Mean scores of the *relationship* domain ranged from 8.52 to 10.51, of the *decision-making* domain from 7.50 to 9.60, of the *human resource* domain from 7.09 to 9.50 and of the *performance* domain from 8.79 to 11.94. The highest mean was recorded for the scale *concern for quantity*, which forms part of the *performance* domain, indicating that there is a strong emphasis on the amount of work being done in the organisation.

The results of the MQ indicated that mean scores for the *energy and dynamism* domain ranged from 18.44 to 34.19, for the *intrinsic motivation* dimension from 18.64 to 30.62, for the *synergy* dimension from 31.62 to 34.89, and for the *extrinsic motivation* dimension from 29.21 to 33.69. The highest recorded mean score was 34.89 for the scale *personal growth* included under the *synergy* dimension. The personal growth scale concerns the extent to which people are motivated by opportunities for training and development and acquiring new skills. This high score illustrates that employees in the organisation were particularly motivated by the ideal of personal growth.

## 6.2 Reliability analysis

The reliability of both instruments was determined first. The alpha coefficients of the four domains ranged from 0.52 to 0.74 for the relationship domain, 0.00 to 0.65 for the decision-making domain, 0.57 to 0.83 for the human resource domain, and 0.27 to 0.72 for the performance domain of the CCQ.

The alpha coefficients for all the scales of the CCQL can be considered acceptable for this study except for the scale *degree of formalisation*, which recorded a very low alpha coefficient below the required 0.20 as proposed by Watkins and Mauer 1994:78-85. Considering the low alpha coefficient, this scale was not used in the study.

The reliabilities for the four dimensions of the MQ ranged from 0.46 to 0.75 for the energy and dynamism dimension, 0.22 to 0.54 for the intrinsic motivation dimension, 0.44 to 0.66 for the synergy dimension, and 0.33 to 0.65 for the extrinsic motivation dimension. Two scales that were problematic were those measuring flexibility and material reward. In terms of the latter scale, the problematic item was "Getting perks from the job that are worth a lot of money".

When the reliabilities were re-calculated for the scale without this item, the alpha coefficient increased to 0.59. In light of the above, it was decided to omit the scale *flexibility* from the study because of its low alpha coefficient of 0.22.

### 6.3 The impact of demographic variables on organisational culture

No significant gender differences were noted in terms of organisational culture. The variable *gender* was therefore not included in further analyses.

Table 2 provides the results of the MANOVA performed for the four demographic variables

**TABLE 2: MANOVA for demographic variables in respect of all the scales of the CCQL (N=100)**

Variable	Wilks' lambda	p-value	F	Effect df	Error df	Partial eta-squared
Age	0.45	0.0107	1.69	44	152	0.33
Education	0.35	0.0000	2.42	44	152	0.41
Seniority	0.72	0.1706	1.35	22	77	0.28
Service	0.56	0.2680	1.15	44	152	0.25

Source: Calculated from survey results

Table 2 shows that the demographic variables, *age* and *education*, impacted significantly on respondents' scores on the CCQL. This is illustrated by a Wilks' lambda of 0.45 for age, with an associated  $F(44,152) = 1.69$ ,  $p = 0.0107$ , and a Wilks' lambda for education equal to 0.35, with an associated  $F(44, 152) = 2.42$ ,  $p = 0.00000$ . The Wilks' lambda for seniority and length of service indicates that the multivariate effects for both variables were statistically insignificant. In order to determine the effect size between the groups, a D-statistic was calculated for the various educational levels and age groups.

The results for the educational levels, which showed large D-statistics, are portrayed in tables 3 and 4 below. With respect to age, differences amongst the groups were noted for the decision-making domain on the scales *employee influence on decisions* and

*environmental concern*. In order to determine the effect between the two scales, D-statistics were calculated. The effects were small to moderate, and are thus not reported further. Only the results of the scales with large D-statistics are reported in the tables and discussions that follow.

Table 3 shows large D-statistics between employees who had completed a post-matric qualification or certificate and those who were categorised as grade 12 and below for the domains *performance*, *decision-making*, *relationships*, and *human resource*, as measured by the CCQL.

With regard to the performance domain, large effects were noted for the scales *encouragement of creativity* and *customer orientation*. For the decision-making domain, large effects were recorded on the scales *concern for safety*, *decision-making effectiveness* and *concern for longer term*. For the *relationships* domain, large effects were recorded on the scales *awareness of organisational goals* and *communication effectiveness*.

Finally, for the human resource domain large effects were recorded on the scales *emphasis on performance-related rewards*, *concern for employees*, *concern for career development* and *job involvement*.

Table 4 shows the large D-statistics between the groups of employees who had a grade 12 qualification and below and those who had a degree and postgraduate qualification. Large effects were recorded in the performance domain for the scales *use of new equipment*, *concern for quality*, *customer orientation* and *encouragement of creativity*. In the human resource domain, large effects were recorded in the scales *concern for job involvement* and *career development*, and in the decision-making domain for the scale *concern for safety*.

It is evident from the above that differences in educational levels impact on the perception that respondents have of corporate culture. In terms of education, the means of the scores for employees who had a lower level of education tend to be higher than those who were more highly educated.

**TABLE 3: D-statistics for educational levels between grade 12 and below, and post-matric for CCQL**

Scale	Grade 12 and below (N=16)		Post-matric certificate (N=37)		D-statistic
	Mean	Std. dev	Mean	Std. dev	
Concern for safety (D)	11.13	2.16	9.19	2.33	0.85
Customer orientation (PD)	13.38	2.00	11.46	2.28	0.87
Decision-making effectiveness (D)	10.25	2.57	8.24	2.10	0.89
Awareness of organisational goals (R)	10.56	2.03	8.30	2.63	0.92
Encouragement of creativity (PD)	10.69	1.82	8.59	2.44	0.92
Emphasis on performance-related rewards (HR)	9.81	2.56	7.03	2.68	1.05
Concern for longer term (D)	9.88	1.20	7.76	2.27	1.05
Concern for employees (HR)	10.31	3.16	7.27	2.64	1.09
Concern for career development (HR)	9.69	2.75	6.30	2.93	1.18
Job involvement (HR)	11.25	2.02	8.92	1.95	1.18
Communication effectiveness (PD)	9.63	2.22	6.81	2.32	1.23

Note: D = decision making; PD = performance dimension; R = relationship dimension, HR = human resources dimension

Source: Calculated from survey results



Employees with lower educational qualifications, for example, scored higher than the other educational groups on the scales *concern for safety*, *job involvement* and *customer orientation*.

This highlights that they viewed the organisation as paying more attention to safety for both customers and workers, that they were more enthusiastic about their jobs and were motivated to work well, and that they recognised the importance of putting the customer first.

**TABLE 4: D-statistics for CCQL between grade 12 and below, and degree and postgraduate**

Scale	Grade 12 and below (N=16)		Degree and post-graduate (N=47)		D-statistic
	Mean	Std. dev.	Mean	Std. dev.	
Use of new equipment (P)	11.38	1.59	9.26	2.85	0.81
Encouragement of creativity (P)	10.69	1.82	8.30	3.14	0.83
Concern for quality (P)	12.44	1.93	10.36	2.44	0.89
Concern for career development (HR)	9.69	2.75	6.83	2.97	0.98
Customer orientation (P)	13.38	2.00	11.13	2.24	1.03
Job involvement (HR)	11.25	2.02	8.57	2.37	1.17
Concern for safety (HR)	11.13	2.16	8.40	2.33	1.19

Note: PD = performance dimension; HR = human resources dimension

Source: Calculated from survey results

#### 6.4 The impact of demographic variables on employee motivation

Table 5 provides the overall, multivariate effects for the different groups.

**TABLE 5: MANOVA for age, education, seniority and length of service in respect of all the scales of the MQ (N=100)**

Variable	Wilks' lambda	p-value	F	Effect df	Error df	Partial eta-squared
Age	0.67	0.3770	1.07	34	162	0.18
Education	0.39	0.0000	2.82	34	162	0.37
Seniority	0.66	0.0028	2.53	17	82	0.34
Service	0.51	0.0034	1.94	34	162	0.29

Source: Calculated from survey results

Table 5 indicates that overall, multivariate effects for the different groups were all statistically significant except for age.

In order to determine whether the differences were significant, a D-statistic was calculated. The results of the large D-statistics are provided in tables 6 and 7 below.

Table 6 shows the D-statistics between the groups of employees who had a grade 12 and below qualification and those who had a post-matric certificate. Large effects were recorded for the scales *achievement* and *autonomy*. The results show that the higher their level of education, the more employees were motivated by being given challenging targets and by the feeling that their abilities are challenged, and by being given the scope to organise their jobs as they see fit.

**TABLE 6: D-statistics for MQ scales between employees with grade 12 and below, and those with a post-matric certificate**

Scale	Grade 12 and below (N=16)		Post-matric certificate (N=37)		D- statistic
	Mean	Std. deviation	Mean	Std. deviation	
Achievement (ED)	31.13	2.895	34.62	2.851	-1.22
Autonomy (IM)	27.31	3.135	30.51	4.187	-0.82

Note: ED = energy and dynamism; IM = intrinsic and motivation scale

Source: Calculated from survey results

**TABLE 7: D-statistics for MQ scales between employees with grade 12 and below, and those with a degree and postgraduate qualification**

Scale	Grade 12 and below (N=16)		Degree and post graduate (N=47)		D- statistic
	Mean	Std. dev.	Mean	Std. dev.	
Achievement (ED)	31.13	2.895	34.89	2.623	-1.40
Interest (IM)	28.38	3.284	32.13	3.379	-1.12
Autonomy (IM)	27.31	3.135	31.83	3.801	-1.24
Personal principles (S)	29.81	2.834	33.53	3.276	-1.17

Note: ED = energy and dynamism; IM = intrinsic and motivation scale; S = synergy.

Source: Calculated from survey results

Large effects were evident for the scales *achievement*, *autonomy*, *interest* and *personal principle*. It was further evident that that the higher the education level employees attained, the more they were motivated by receiving challenging targets, by feeling that their abilities were challenged, by having some scope in organising their jobs as they saw fit, by conforming to high ethical and quality standards and by jobs that provide variety and stimulation.

Table 8 provides the D-statistics between the groups of employees who had a post-matric certificate and those who held a degree or postgraduate qualification.

**TABLE 8: D-statistics for MQ scales between employees with a post-matric certificate and those with a degree and postgraduate qualification**

Scale	Post-matric certificate (N=37)		Degree and postgraduate (N=47)		D-statistic
	Mean	Std. dev.	Mean	Std. dev.	
Interest (IM)	29.32	3.037	32.13	3.379	-0.87

Note: IM = intrinsic motivation

Source: Calculated from survey results

A large effect was noted for the scale *interest*, suggesting that the higher employees' education level, the more they were motivated by jobs that provide variety and stimulation.

In summary, tables 6, 7 and 8 reveal that the higher employees' educational level, the more they were motivated by *interest and autonomy* of the *intrinsic motivation* dimension, *achievement* of the *energy and dynamism* dimension, and *personal principles* of the *synergy* dimension.

The results of the D-statistics between general staff and management were subsequently examined, and table 9 portrays these results.

**TABLE 9: D-statistics for MQ scales between general staff and management**

Scale	General staff (N=82)		Management (N=18)		D-statistic
	Mean	Std. dev.	Mean	Std. dev.	
Level of activity (ED)	21.29	3.917	24.56	3.417	-0.85
Interest (IM)	29.78	3.330	33.72	2.866	-1.21
Personal principles (S)	31.56	3.371	34.33	2.326	-0.86

Note: ED = energy and dynamism; IM = intrinsic and motivation scale; S = synergy.

Source: Calculated from survey results

It is evident from table 9 that compared to general staff, staff at managerial level was particularly motivated by *level of activity, interest and personal principles*.

**TABLE 10: D-statistics between employees with less than 6 years of service with the organisation and those with more than 10 years of service with the organisation**

Scale	0 - 6 years (N=57)		10 years< (N=11)		D-statistic
	Mean	Std. deviation	Mean	Std. deviation	
Progression (EM)	33.93	3.283	30.27	4.777	1.03

Note: EM = extrinsic motivation

Source: Calculated from survey results

Significant differences among participants based on their length of service were recorded for the extrinsic motivation dimension on the scales *material reward* and *progression*. In order to determine the effect size between the different groupings in terms of length of service, a D-statistic was calculated. The results are provided in tables 10 and 11. The mean for the groups with a tenure of less than 6 years and between 6 and 10 years are not reported due to the recorded small D-statistics.

Table 10 shows that a large D-statistic was recorded for the scale *progression* between employees with less than 6 years of service with the organisation and those with more than 10 years of service with the organisation.

**TABLE 11: D-statistics between employees with 6 to 10 of service with the organisation and those with more than 10 years of service with the organisation**

Scale	6 – 10 years (N=32)		10 years< (N=11)		D-statistic
	Mean	Std. dev.	Mean	Std. dev.	
Material reward (EM)	30.16	3.153	27.18	3.545	0.91
Progression (EM)	34.44	3.141	30.27	4.777	1.15

Note: EM = extrinsic motivation

Source: Calculated from survey results

Table 11 shows that a large D-statistic was recorded for the scales *material reward* and *progression*.

## 6. DISCUSSION

The main focus of the study was to investigate the impact of gender, age, education, seniority and years of service on organisational culture and employee motivation in a health insurance organisation in Botswana.

By means of the Cronbach alpha coefficient, the reliability of the MQ and CCQL was found to be acceptable. Since very low reliabilities were found for the scales *degree of formalisation* and *flexibility*, they were omitted from the current research. Differences for the constructs of employee motivation and corporate culture were noted in terms of the different demographic variables. In particular, education and age were found to have an impact on employees' perception of corporate culture.

Conversely, education, seniority and length of service in particular impacted on employee motivation. With regard to employee motivation, the results revealed that as employees move up the corporate ladder and stay longer with an organisation, they are less motivated by material reward and progression.

Further, as employees become more educated, they tend to be less motivated by level of activity, achievement, fear of failure, interest, autonomy, personal principles and material reward. Research by Roos and Van Eeden (2008:60) using the same questionnaire found similar results for the dimensions ease and security, and material reward. The sample group was motivated to a larger extent than the general population by contextual factors in the workplace, such as pleasant working conditions and job security.

With regard to corporate culture, it was evident that employees with lower formal educational qualifications viewed corporate culture in a more positive light on a number of scales compared to the more highly educated group. In terms of the variable *education*, the results revealed that employees with a low level of education were more enthusiastic about their jobs, had a good relationship with management, perceived the organisation to be meritocratic, were aware of key objectives and strategic goals and viewed the organisation as being more committed to the training and development of its employees than employees in other educational levels.

The MANOVA further revealed that there was no significant relationship between employees' level of seniority and employees' tenure with corporate culture. The results also indicated no significant differences for age groups. In a very similar study in a marketing company in South Africa, Roos and Van Eeden (2008:136,139) found somewhat different results. They found significant differences for one cultural scale of the CCQL (*performance*) among age groups, as well as significant differences among tenure groups in terms of the decision-making and relationships domains. For seniority significant differences were noted for several CQOL scales. This may point to cultural differences between the two countries.

## 7. FUTURE RESEARCH

It is recommended that the relationship between corporate culture and employee motivation be further explored in other organisational environments and countries to determine if similar results are obtained. Employee motivation and organisational culture typically play a key part in any business strategy and organisations characterised by poor employee motivation or that do not focus on managing their culture may find it difficult to achieve optimal performance levels.

Insight into the sources of motivation and corporate culture in developing countries should guide employers in this context in formulating strategies for supporting loyalty and retention among employees. This study provides an initial investigation of a source, demographic factors, that appear to be overlooked in existing research. It sets the scene for further research on the constructs of employee motivation and corporate culture with established measures that proved to have acceptable levels of reliability and validity in this context.

## 8. CONCLUSION

This objective of this research was to investigate the impact of demographic variables on organisational culture and employee motivation in a health insurance company in Botswana that faced considerable competition because of environmental changes. It is clear that the demographic profiles of employees in a Botswanan health insurance company – with the exception of gender – affected their motivation and perceptions of corporate culture.



Employees' education and age particularly impacted on their perception of corporate culture. Conversely, education, seniority and length of service particularly impacted on employee motivation. It is therefore advisable that managers recognise demographic characteristics and fully appreciate their considerable potential to affect organisational performance. It may also be important for organisations to customise their remuneration strategies and job characteristics based on demographic profiles of the organisation.

With regard to education, significant relationships were found for the energy and dynamism, extrinsic motivation, and synergy dimensions. It appeared that employees with high levels of education were motivated by working under pressure and accomplishing a great deal within a rapid time frame, being given challenging targets and feeling that their abilities were stretched, being given the scope for organising their work as they see fit and by good promotional prospects. It is important for organisations to take this trend into account since more highly educated employees appear to be more willing and able to work under pressure.

With regard to motivation, the results revealed a significant positive relationship between employee motivation and seniority as well as a significant negative relationship between employee motivation and length of service. In general, it appeared that as the level of seniority increased, employee motivation also increased, and that as tenure increased, the extent to which employees were motivated by progression and material benefits decreased

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