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Investigating the relationship between organizational culture and work engagement

Abstract

The aim of this study is to investigate the relationship between organizational culture and work engagement. Work engagement is shown to be powerfully linked to a range of business success outcomes. Although a large number of studies investigate the link between employees' work engagement and organizational variables, there remains a dearth of scientific research on organizational culture and its impact on work engagement. A quantitative research design is undertaken in a South African ICT company. A total of 455 employees complete the South African Culture Instrument and the Utrecht Work Engagement Scale.

Correlation analysis shows that all the dimensions of organizational culture correlate positively with work engagement dimensions. Regression analysis reveals that leadership, management processes and goals, and objectives make the strongest statistically unique contribution in predicting the dimensions of work engagement. As work engagement is shown to relate to several positive work outcomes, it makes sense for organizations to increase their employees' levels of work engagement by addressing and improving organizational culture. The scientific understanding of the potential relationship between these constructs extends organizational culture and work engagement literature by empirically establishing an association between the two constructs.

Keywords: organizational culture, work engagement, antecedents, vigour, dedication and absorption. **JEL Classification:** L2.

Introduction

For decades, researchers have determined that an organization's culture leads to a significant competitive advantage in the business environment (Fortado & Fadil, 2012). Organizational culture (OC) is acquiring support as a predictive and explanatory construct in organizational studies (Liu, Shuibo & Meiyung, 2006), and has been linked to job satisfaction and commitment (Silverthorne, 2004), and is perceived to be a central determinant of overall organizational efficacy (Haggard & Lapoint, 2005). The ubiquitous and permeating nature of an organization's culture demands that organizations identify the fundamental dimensions of their OC and the effect thereof on employee-related variables, such as work engagement.

Employees' work engagement appears to be a good indicator of outcomes that a business values, and is thus a good barometer of organizational health (Rich, Lepine & Crawford, 2010), and been shown to be powerfully linked to a range of business success including commitment, outcomes, satisfaction, productivity, innovation, and retention, and, in general, positive work outcomes (Halbesleben, 2010). Work engagement is measured at the individual level, however, there clearly are organizational (i.e. culture, leadership, etc.) factors that will influence an employee's work engagement levels (Alarcon, Lyons & Tartaglia, 2010). Creating a culture that is conducive to work engagement becomes critical for optimal organizational outcomes. Therefore, the key focus of this study is to investigate the relationship

between OC and work engagement, in an effort to determine whether employees' perceptions of OC are related to their level of work engagement.

1. Background to the study

If an organization does not have employees who are committed to the organization and engaged in their work strategy implementation and execution, as well as change, will be difficult, if not impossible (Saks, 2006). Understanding the conditions under which individuals would actively engage, while others would disengage, is highly relevant for both employees and employers (Wildermuth & Pauken, 2008). Organizational values, along with beliefs, assumptions, expectations, attitudes, philosophies, and norms, form the basis of OC, and are integral to the distinct identity of every organization (Schein, 1990). Chalofsky (2003) stated that meaningfulness is more likely to be experienced at work when there is congruence between the values and beliefs of the employee and the organization. The more meaningful individuals find their work, the higher will be their engagement in it.

Thus, both the organizational culture and the work engagement of employees are in danger when employees' personal values are incongruent with those of the organization. The implication that OC may influence levels of work engagement therefore potentially has a far-reaching impact, and the implied link between these constructs makes this an important relationship to study and understand.

2. Organizational culture

Research by Pettigrew (1979), Deal and Kennedy (1982), Ouchi (1981), Peters and Waterman (1982),

and Schein (1985) were primarily responsible for promoting the popularity of the concept of an OC. This wealth of literature offers strong support for the notion that OC is an important concept in business (see, for example, Deal & Kennedy, 1982; Denison, 1990; Ouchi, 1981; Peters & Waterman, 1982; and Schein, 1985), that it may be linked to organizational effectiveness (Ott, 1989) and central processes, such as leadership and governance (Schein, 1985), and that it is a fundamental component of the general performance of an organization (Martins, Martins & Terblanche, 2004).

Numerous accepted definitions of OC are used in the literature, which represent the epistemological backgrounds of the researchers (Bellot, 2011). Schein's (1990) definition and variations thereof have been used by most organizational culture researchers. The present study adopted the definition developed by Martins (which is based on Schein's definition (1990, p.111)) and subsequently define organizational culture as:

... an integrated pattern of human behavior which is unique to a particular organization and which originated as a result of the organization's survival process and interaction with its environment. Culture directs the organization to goal attainment. Newly appointed employees must be taught what is regarded as the correct way of behaving (Martins, 1989, p. 15).

There also seems to be a wealth of OC models that attempt to explain the relationships between OC and related constructs. Martins (1989) developed a model based on the work of Schein (1985) to describe OC. The model is based on the interaction between three key elements: the organization's subsystems, survival functions and the dimensions of culture (Martins, 1989). It is a comprehensive model, as it encompasses all the aspects of an organization upon which OC could have an influence, and vice versa (Martins et al., 2004), but for the purposes of this study, the model is used to determine which dimensions of OC may influence work engagement in organizations.

With respect to the measurement of culture, Ostroff, Kinicki and Muhammad (2013) indicated that it may be senseless to debate the merits of using surveys (quantitative measurement) versus case studies (qualitative measurement), as there is too much variety in each method for a general comparison between them to be valid, and both offer valuable insight into OC. The present research adopted a quantitative approach to the study of OC since this approach has benefits such as the covering of large samples with ease, being applicable even if there should be time constraints, having a lower

level of intrusiveness than many quantitative methods, in agreement with the reasons given by Martins and von der Ohe (2006) for making more use of validated quantitative tools.

Research has placed a great deal of emphasis on whether culture and climate are different or similar, and, more recently, looked at how and why these two constructs can be interrelated, to offer a more complete and parsimonious interpretation of higherorder social structures of an organization (Ostroff et al., 2013). The most accepted definition of climate is "the relatively enduring organizational environment that (a) is experienced by the occupants, (b) influences their behavior, and (c) can be described in terms of the values or a particular set of characteristics or attributes of the environment" (Tagiuri & Litwin, 1968, p. 25). According to Denison (1996), climate develops from the deeper core of culture. The present study adopted the view taken by Denison (1996) and Schneider (2000), who stated that culture and climate are not strongly differentiated, but are complementary constructs that represent different but overlapping interpretations of the nuances in the psychological life of organizations.

3. Work engagement

The interest in and discussion of work engagement has been escalating in human resource development, psychology, management, and in occupational health care communities (e.g., see Bakker, Schaufeli, Leiter & Taris, 2008; Luthans, Norman, Avolio & Avey, 2008; Rich et al., 2010; Christian, Garza & Slaughter, 2011; Shuck, Reio & Rocco, 2011), and within the context of the broader field of positive organizational behavior (Bakker & Schaufeli, 2008), in which the concept usefully provides an emphasis on positive aspects of organizational life (Sonnetag, 2011).

Kahn (1990) was the first to conceptualize engagement, defining personal engagement as the concurrent manifestation and expression of an individual's ideal self in task behaviors that encourage a connection to work and to others, a connection to personal presence (physical, cognitive, and emotional), and a connection to active, full role performance.

Maslach and Leiter (1997) postulated that engagement exists on a continuum, and is the direct opposite of the three burnout dimensions, namely exhaustion, cynicism, and a sense of inefficacy. However, according to Schaufeli and Salonova (2011), burnout and engagement are exclusive of one another; individuals undergoing low burnout may not be undergoing high engagement, and vice versa, which led Schaufeli, Salanova, Gonźalez-Romá and Bakker (2002) to operationalize work engagement as distinct from burnout.

Work engagement as defined by Schaufeli et al. (2002, p. 74) is:

... a positive, fulfilling, work-related state of mind that is characterized by vigour, dedication, and absorption. Rather than a momentary and specific state, engagement refers to a more persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual, or behavior.

The researchers agree with the argument presented by Bakker et al. (2008) that the field of engagement at work is best served by a consistent definition for work engagement, one that addresses employees' experience of work activity. Therefore the researchers adopted the definition of work engagement as postulated by Schaufeli et al. (2002).

The strong appeal and legitimacy of work engagement can be attributed to the multitude of studies support the relationship between high engagement levels and the following outcomes: commitment (Halbesleben, 2010; Saks, 2006), financial profit (Harter, Schmidt & Hayes, 2002), improved performance (Bakker & Bal, 2010) in terms of improved inter-role and extra-role behavior (Saks, 2006), enhanced job satisfaction (Saks, 2006), managerial effectiveness (Luthans & Peterson, 2002), better individual performance (Kahn, 1990), greater business unit performance (Harter et al., 2002), and proactive behavior (Salanova & Schaufeli, 2008).

In the light of the literature study, the following hypotheses were empirically tested:

H1: There is a statistically significant positive correlation between each of the dimensions of organizational culture and work engagement respectively.

H2: Organizational culture is a statistically signifycant predictor of work engagement.

4. Research objectives

The main objectives of the study were to: (1) investigate the relationship between each of the dimensions of organizational culture and work engagement respectively, and (2) to determine if organizational culture is a statistically significant predictor of work engagement.

5. Research design

5.1. Research approach. A scientific quantitative survey was used to achieve the research objectives and to test the hypotheses. Correlation and regression data analysis techniques were applied, which offered plausible ex post facto explanations for the relationships between each of the dimensions of OC and work engagement respectively, and the predictive value of the dimensions of OC.

5.2. Research method. *5.2.1.* Participants and sampling. The sample consisted of 3 000 permanent employees from middle-management levels and below in an ICT company in South Africa (N = 20771). Proportionate random stratified sampling was implemented, which allowed the researcher to sample the rare extremes of the population for higher statistical precision, compared to random sampling (Marcyzk, DeMatteo & Festinger, 2005).

A total of 455 usable questionnaires were received, which yielded a response rate of 15.14%. As seen in Table 1, most participants were male (70.8%). The majority of the respondents were White (39.6%), followed by Black (38%), Coloured (13.2%), and Indian (9.2%). This suggested an adequate representation of the organization's labor force. The majority of the sample comprised employees at an operational level (62.4%).

Table 1. Demographic profile of the respondents

Item	Category	Frequency (#)	Percentage (%)
Gender	Male	322	70.8
Gender	Female	133	29.2
	African	173	38
Race	Coloured	60	13.2
Race	Indian	42	9.2
	White	180	39.6
	20-29	38	8.4
Ago	30-39	132	29
Age	40-49	180	39.6
	50+	105	23
	Management	35	7.7
Job level	Operational	284	62.4
Job level	Specialist	99	21.8
	Supervisor	37	8.1

5.2.2. Measuring instruments. The Utrecht Work Engagement Scale (UWES) was developed by Schaufeli et al. (2002), and is aimed at measuring the participants' work engagement. The instrument consists of 17 items, which are scored on a 7-point frequency scale, ranging from Never (0) to Daily (6). The measure has three sub-scales, namely Vigour, Dedication, and Absorption (Schaufeli et al., 2002). A typical item for Vigour is: "When I get up in the morning, I feel like going to work." A typical item for Dedication is: "My job inspires me." A typical item for Absorption is: "I am immersed in my work." A high score indicates high levels of engagement. The internal consistency of the measure ranges from a Cronbach alpha coefficient of 0.68 to one of 0.91 (Schaufeli et al., 2002). In the South African context, Storm and Rothmann (2003) confirmed a three-factor structure for the UWES, reporting Cronbach alpha coefficients of 0.78 for Vigour, 0.89 for Dedication, and 0.78 for Absorption, for a sample of 2 398 South African police officers.

The South African Culture Instrument (SACI) was locally developed for the South African context, and measures the extent to which employees identify with the various elements of the organization's existing and ideal culture (Martins & Coetzee, 2007; Martins, 2014). The overall reliability (Cronbach alpha coefficient) of the SACI was measured at 0.933, and the internal consistency of the dimensions ranged from 0.655 to 0.932 (Martins, Martins & Terblanche, 2004). Respondents make use of a 5-point Likert scale to rate each statement. A low rating (1) indicates that the respondent strongly disagrees, and a high rating (5) indicates strong agreement. A typical question for the Leadership dimension is: "My immediate manager sets an example everyone can follow – he/she walks the talk." A typical question for Means to achieve objectives is: "Conflict between divisions/functions in the company does not cause a waste of resources." All factors are scored such that a low score indicates non-acceptance of the cultural dimension, while a high score indicates acceptance (Martins & Coetzee, 2007).

5.2.3. Research procedure. Permission to conduct the study was obtained from the management of the organization within which the study was conducted. The survey was conducted with a web-based questionnaire application. Survey questionnaires were sent electronically via the company's electronic com-

munication system to the sample of 3 000 permanent employees, requesting them to participate in the survey. In the invitation e-mail, it was clearly stated that participation was voluntary, and that no information provided would be linked to the identity of a specific person (i.e. anonymity would not be compromised).

6. Results

The purpose of the research study was to investigate the relationship between each of the dimensions of OC and work engagement respectively, and to determine if the dimensions of OC are able to predict the dimensions of work engagement. The SACI, developed by Martins (1989, 2014), was used to measure OC. The revised version of the instrument, consisting of 60 items, were used in the present study. These 60 items were categorized into seven dimensions in the questionnaire.

6.1. Descriptive statistics. The descriptive statistics of the dimensions of the SACI appears in Table 2. All dimensions had a negative skewness, suggesting an overall positive tendency towards *Organizational culture*. This finding is supported by the fact that a slight majority of dimensions had a mean value greater than the middle category (3.2), with an overall mean score of 3.27 across all dimensions (on a scale of 1-5, *Strongly disagree* to *Strongly agree*).

	N	Mean	Std. Deviation	Skewness	Kurtosis	Cronbach's alphas
Leadership	455	3.54	0.85	-0.65	-0.04	0.94
Strategy and change management	455	3.06	0.81	-0.36	-0.41	0.91
Employee needs and objectives	455	2.83	0.87	-0.11	-0.81	0.89
Means to achieve objectives	455	3.02	0.77	-0.25	-0.51	0.86
Management processes	455	3.30	0.71	-0.39	-0.20	0.86
Goals and objectives	455	3.99	0.66	-0.70	1.36	0.73
External and internal environment	455	3.61	0.75	-0.44	0.18	0.79

Table 2. Descriptive statistics and reliabilities for the SACI

Mean scores were used to summarize the culture of the organization, and to distinguish between possible positive and negative perceptions, with scores above 3.2 indicating a positive perception and scores below 3.2 indicating a negative perception of that dimension. According to the Human Sciences Research Council (1994, as cited in Odendaal & Roodt, 1998), research shows that an average of 3.20 can be seen as a reasonable cut-off point to differentiate between positive and negative perceptions.

Goals and objectives (3.99), followed by External and internal environment (3.60), Leadership (3.54), and Management processes (3.30) were positively perceived by employees, meaning that the majority of the OC dimensions were positively viewed by employees. Among those dimensions that were

perceived negatively was *Employee needs and objectives*, which scored the lowest, with a mean score of 2.83, followed by *Means to achieve objectives* (3.02) and *Strategy and change management* (3.06).

The descriptive statistics of the sub-dimensions of the UWES appears in Table 3. Table 3 illustrates that all sub-dimensions had a strongly negative skewness, suggesting a positive tendency towards work engagement. This outcome was to be expected, as the tool was developed to give negatively skewed results (Schaufeli et al., 2002).

The alpha coefficients of all three sub-dimensions ranged from 0.85 to 0.87, indicating internal consistencies within the recommended range (Table 3). The overall reliability of the UWES was 0.949.

Table 3. Descriptive statistics and reliabilities for the UWES

	N	Mean	SD	Skewness	Kurtosis	Cronbach's Alphas
Vigour	455	4.56	1.16	-1.04	0.70	0.87
Dedication	455	4.63	1.27	-1.16	0.93	0.89
Absorption	455	4.44	1.19	-1.01	0.55	0.85

6.2. Inter-correlations between dimensions. Intercorrelations between the dimensions were calculated using Pearson's product-moment correlation coefficient to measure the nature and the strength of the relationship between the variables.

The inter-correlation matrix, reflected in Table 4, was used for testing H1. It was found that all the dimensions of OC were positively related to all the

dimensions of work engagement. Thus there is a statistically significant relationship between each of the dimensions of OC and work engagement respectively. The OC variable *Leadership* correlated significantly and positively with *Vigour* (r = .378; medium effect; $p \le 0.01$), *Dedication* (r = .316; medium effect; $p \le 0.01$), and *Absorption* (r = .316; medium effect; $p \le 0.01$).

Table 4. Inter-correlations matrix of constructs

		1	2	3	4	5	6	7	8	9	10
1	Leadership	1									
2	Strategy & change management	.477**	1								
3	Employee needs and objectives	.489**	.727**	1							
4	Means to achieve objectives	.522**	.712**	.593**	1						
5	Management processes	.568**	.752**	.665**	.712**	1					
6	Goals and objectives	.277**	.500**	.376**	.347**	.405**	1				
7	External and internal environment	.272**	.552**	.550**	.409**	.479**	.436**	1			
8	Vigour	.378**	.358**	.306**	.322**	.409**	.360**	.260**	1		
9	Dedication	.316**	.354**	.294**	.310**	.392**	.326**	.242**	.861**	1	
10	Absorption	.316**	.312**	.278**	.254**	.332**	.265**	.220**	.808**	.812**	1

Note: ** Correlation is significant at the 0.01 level (2-tailed). $r = \ge 0.1 \ge 0$.3- small practical effect; $r = \ge 0.30 \le 0.49$ – medium practical effect; $r \ge 0.50$ – large practical effect (Cohen, 1988).

The OC dimension Strategy and change management correlated significantly and positively with Vigour (r = .358; medium effect; $p \le 0.01)$, Dedication (r = .354; medium effect; $p \le 0.01)$, and Absorption (r = .312; medium effect; $p \le 0.01)$. The OC dimension Management processes correlated signify-cantly and positively with Vigour (r = .409; medium effect; $p \le 0.01)$, Dedication (r = .392; medium effect; $p \le 0.01)$, and Absorption (r = .332; medium effect; $p \le 0.01)$.

Based on the above, H1: There is a significant positive relationship between each of the dimensions of OC and work engagement respectively, is accepted.

6.3. Inferential statistics: multiple regression. *6.3.1.* Regression analysis for dependent variable:

Vigour. According to Table 5, the dimensions of OC explained 22.8% of the variance in *Vigour* (*F*-value: $p \le 0.000$). Goals and objectives made the strongest statistically unique contribution in predicting Vigour $(\beta = 0.218; p \le 0.000)$. This was followed by Management processes ($\beta = 0.216$; $p \le 0.01$) and Leadership ($\beta = 0.207$; $p \le 0.000$), indicating that these OC dimensions made a slightly less but nonetheless statistically unique contribution in predicting Vigour. The association between the OC variables of Strategy & change management, Employee needs and objectives, Means to achieve objectives, and External and internal environment with Vigour was insignificant, suggesting that these variables did not make a significant contribution to the prediction of Vigour.

Table 5. Multiple regression analysis – dimensions of the SACI predicting vigour

	Model	summary			ANOVA							
R	<i>R</i> -square	Adjusted <i>R</i> -square	Std. error of the estimate	Vigour	Sum of squares	df	Mean Square	F	Sig.			
			1.01655	Regression	145.981	7	20.854	20.181	.000a			
.490a	0.24	0.228		Residual	461.921	447	1.033					
				Total	607.903	454						

	Coefficients										
Model	Unstandardiz	ed coefficients	Standardized coefficients	,							
(a) Predictors	В	Std. Error	Beta	l	ρ						
(Constant)	0.88	0.348		2.53	0.012						
Leadership	0.284	0.071	0.207	3.996	0.000						
Strategy and change Management	0.005	0.112	0.003	0.044	0.965						
Employee needs and objectives	-0.042	0.087	-0.031	-0.483	0.629						
Means to achieve objectives	-0.015	0.097	-0.01	-0.15	0.881						
Management processes	0.35	0.116	0.216	3.007	0.003						
Goals and objectives	0.385	0.087	0.218	4.446	0.000						
External and internal environment	0.037	0.081	0.024	0.463	0.643						

6.4. Dependent variable: vigour. According to Table 6, the dimensions of OC explained 14.2% of the variance in *Absorption* (*F*-value: $p \le 0.000$). *Leadership* made the strongest statistically unique contribution in predicting *Absorption* ($\beta = 0.181$; $p \le 0.001$). This was followed by *Management processes* ($\beta = 0.143$; $p \le 0.05$) and *Goals and objectives* ($\beta = 0.143$).

= 0.125; $p \le 0.01$), indicating that these OC dimensions made a slightly less but nonetheless statistically unique contribution in predicting *Absorption*. The association between the remaining OC variables with *Absorption* was insignificant suggesting that these variables did not make a significant contribution to the prediction of *Absorption*.

Table 6. Multiple regression analysis – dimensions of the SACI predicting absorption

		Model summary					ANOV	Ą		
R	<i>R</i> -square	Adjusted R-square	Std. error of the estimate	Absorption	Sum of	squares	df	Mean square	F	Sig.
				Regression	99.	99.692		14.242	11.764	.000b
0.394a	0.156	0.142	1.1003	Residual	541.164		447 1.211			
				Total	640.856		454			
			Co	efficients						
	Mc	odel	Unstandardized	l coefficients		Standardized coefficients			+	,
	IVIC	ouei	В	Std. error		Beta			l	р
(Constar	nt)		1.594	0.376				4.237	0	
Leadersi	hip		0.254	0.077	1	0.181			3.308	0.001
Strategy	& change Ma	nagement	0.102	0.121			0.	07	0.842	0.4
Employe	e needs and d	objectives	0.022	0.094			0.0)16	0.239	0.811
Means to	o achieve obje	ctives	-0.082	0.105			-0.0	054	-0.788	0.431
Managei	Management processes		0.239	0.126	ı	0		0.143		0.059
Goals ar	Goals and objectives		0.227	0.094		0.125		2.426	0.016	
External	and internal e	nvironment	0.034	0.088		0.022		0.387	0.699	

6.5. Dependent variable: Absorption. As can be seen in Table 7, the dimensions of OC explained 18.6% of the variance in *Dedication* (*F*-value: $p \le 0.000$) *Management processes* made the strongest statistically unique contribution in predicting *Dedication* ($\beta = 0.223$; $p \le 0.01$). This was followed by *Goals and objectives* ($\beta = 0.183$; $p \le 0.000$) and

Leadership ($\beta = 0.126$; $p \le 0.05$), indicating that these OC dimensions made a slightly less but nonetheless statistically unique contribution in predicting *Dedication*. The association between the remaining OC variables with *Dedication* was suggesting that these variables did not make a significant contribution to the prediction of *Dedication*.

Table 7. Multiple regression analysis – dimensions of the SACI predicting dedication

ı	Mode	l summary			ANOVA								
R	<i>R</i> -square	Adjusted <i>R-</i> square	Std. error of the estimate	Dedication	Sum of squares	df	Mean square	F	Sig.				
	.445a 0.198 0.186 1.14757		Regression	145.759	7	20.823	15.812	.000b					
.445a		0.186	1.14757	Residual	588.666	447	1.317						
			Total	734.425	454								

	Coefficients										
Model	Unstandardiz	ed coefficients	Standardized coefficients	4							
Model	В	Std. error Beta		l	ρ						
(Constant)	1.056	0.393		2.69	0.007						
Leadership	0.189	0.08	0.126	2.357	0.019						
Strategy and change management	0.076	0.126	0.049	0.603	0.547						
Employee needs and objectives	-0.034	0.098	-0.023	-0.345	0.73						
Means to achieve objectives	-0.002	0.109	-0.001	-0.022	0.983						
Management processes	0.397	0.131	0.223	3.017	0.003						
Goals and objectives	0.355	0.098	0.183	3.631	0						
External and internal environment	0.013	0.091	0.008	0.143	0.886						

Table 7 (cont.). Multiple regression analysis – dimensions of the SACI predicting dedication

6.6. Dependent variable: Dedication. As can be seen in Table 8 the dimensions of OC explained 20.7% of the variance in the total UWES (*F*-value: $p \le 0.000$). *Management processes* made the strongest statistically unique contribution in predicting *Work engagement* ($\beta = 0.205$; $p \le 0.01$). This was followed by *Goals and objectives* ($\beta = 0.183$; $p \le 0.000$) and Leadership ($\beta = 0.000$).

= 0.126; $p \le 0.01$) indicating that these OC dimensions made a slightly less but nonetheless statistically unique contribution in predicting *Work Engagement*. The association between the organizational remaining culture variables was insignificant suggesting that these variables do not make a significant contribution to the prediction of *Work engagement*.

Table 8. Multiple regression analysis – dimensions of the SACI predicting work engagement

		1 0	•	•				•	U		0 0			
		Model summary							ANOVA					
R	<i>R</i> -square	Adjusted R-square	Std. error of	the estimate	Dedic	ation	Sum of	fsquares	df	Mean square		F	Sig.	
					Regres	sion	12	7.38	7	18.1	97	17.98	.000b	
.469a	0.22	0.207	1.00603		Residu	al	452	452.405		1.0	12			
			Tota			579	9.785	454						
				С	oefficient	:S								
	Model					dardized soefficients St			Standardized soefficients				n	
	Model			В		Std.	d. Error		Beta		ι .		р	
(Consta	ant)			1.184		0.	344			2.69		0.007		
Leader.	ship			0.245		0.07		0.126		2.357	(0.019		
Strateg	y and change	management		0.06		0.	111	0.049			0.603	(0.547	
Employ	ree needs and	objectives		-0.017		0.086		-0.023			-0.345		0.73	
Means	to achieve obj	iectives		-0.035		0.	096		-0.001		-0.022	. (0.983	
Manage	Management processes			0.324		0.115		0.223		3.017	(0.003		
Goals and objectives				0.32		0.086		0.183		3.631		0		
Externa	al and internal	environment		0.029		0	.08		0.008		0.143	(0.886	

6.7. Dependent variable: Work engagement. Based on the above analysis, H2: The dimensions of OC are statistically significant predictors of the dimensions of work engagement, are partially accepted.

7. Discussion

The main objectives of the study were to: (1) investigate the relationship between each of the dimensions of OC and work engagement respectively, and (2) to determine if OC is a statistically significant predictor of work engagement.

Correlation analysis indicated a statistically positive relationship between each of the variables of OC and work engagement respectively. The findings of the study therefore support Hypothesis 1, which postulated a positive relationship between each of the dimensions of OC with work engagement respectively. This suggests that positive perceptions

of OC are likely to be related to higher levels of work engagement. These results are consistent with those of previous studies that investigated the culture-work engagement relationship (Greenidge, 2010; and Alarcon et al., 2010). The present study provides evidence that OC is a key consideration in understanding work engagement.

Regression analysis indicated that only three of the seven culture dimensions make a statistically unique contribution in predicting the dimensions of work engagement. The findings of the study therefore provide partial support for Hypothesis 2, which postulated that all the dimensions of OC would significantly predict work engagement.

Overall, the OC dimensions of leadership, goals and objectives, and management processes seem to have a greater influence on the work engagement variables

of vigour, dedication, and absorption, suggesting a greater effect on work engagement.

Conclusion

The findings of this study are in line with previous research where the strong relationship between OC and work engagement was confirmed (Alarcon, 2010; Greenidge, 2010; Shuck et al., 2011). Several lines of research evidence indicate that engaged employees outperform their disengaged counterparts on a number of organizational metrics (Shuck et al., 2011). As work engagement has been shown to relate to several positive work outcomes, the results of the present study suggest that it makes sense for organizations to foster a positive culture, and to

ensure that employees remain engaged in their work, in order to retain workers longer than organizations that fail to promote engagement (Alarcon et al., 2010).

This study did not look into the effect of subgroup differences related to age, gender, seniority, or service units. Identifying aspects of OC that have the strongest impact on work engagement for specific occupational groups in areas where there is high turnover, resignations, and burnout can be highly valuable in future research. Along with organizational cultural antecedents, the consequences of work engagement can also be included in future studies.

References

- 1. Alarcon, G., Lyons, J.B. and Tartaglia, F. (2010). Understanding predictors of engagement within the military, *Military Psychology*, 22, pp. 301-310.
- 2. Bellot, J. (2011). Defining and assessing organizational culture, Nursing Forum, 46 (1), pp. 29-37.
- 3. Bakker, A.B., Hakanen, J.J., Demerouti, E. and Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high, *Journal of Educational Psychology*, 99, pp. 274-284.
- 4. Bakker, A.B. and Schaufeli, W.B. (2008). Special issue: Contexts of positive organizational behaviour, *Journal of Organizational Behavior*, 29, pp. 147-261.
- 5. Bakker, A.B., Schaufeli, W.B., Leiter, M.P. and Taris, T.W. (2008). Work engagement: An emerging concept in occupational health psychology, *Work and Stress: An International Journal of Work, Health and Organizations*, 23 (2), pp.187-200.
- 6. Chalofsky, N. (2003). The emerging construct for meaningful work, *Human Resource Development International*, 6, pp. 69-83.
- 7. Christian, M.S., Garza, A.S. and Slaughter, J.E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance, *Personnel Psychology*, 64 (1), pp. 89-136.
- 8. Cohen, J. (1988). Statistical power analysis for the behavioural sciences (2nd ed.), Hillsdale NJ, Lawrence Erlbaum.
- 9. Deal, T.E. and Kennedy, A.A. (1982). *Corporate cultures: The rites and rituals of corporate life*, Reading, MA, Addison-Wesley.
- 10. Denison, D.R. (1990). Corporate culture and organisational effectiveness, New York, Wiley.
- 11. Denison, D.R. (1996). What is the difference between organisational culture and organisational climate? A native's point of view on a decade of paradigm wars, *Academy of Management Review*, 21, pp. 619-654.
- 12. Fortado, B. and Fadil, P. (2012). The four faces of organisational culture. *Competitiveness review: An International Business Journal incorporating Journal of Global Competitiveness*, 22 (4), pp. 283-298.
- 13. Greenidge, S.A. (2010). *Leadership communication, culture and employee engagement: A correlation study* (Doctoral dissertation), Phoenix, University of Phoenix.
- 14. Haggard, C.R. and Lapoint, P.A. (2005). An examination of subcultural effects: A comparison of faculty and administrative perceptions of organisational culture in a small, liberal arts, religious-affiliated university, *Journal of Organisational Culture, Communications and Conflict*, 9 (1), pp. 105-114.
- 15. Halbesleben, J.R. (2010). A meta-analysis of work engagement: Relationships with burnout, demands, resources and consequences. In M.A. Bakker and M.P. Lieter. *Work engagement: A handbook of essential theory and research*, New York, Psychology Press, pp. 10-24.
- 16. Harter, J.K., Schmidt, F.L. and Hayes, T.L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement and business outcomes: A meta-analysis, *Journal of Applied Psychology*, 87 (2), pp. 268-279.
- 17. Kahn, W.A. (1990). Psychological conditions of personal engagement and disengagement at work, *Academy of Management Journal*, 33 (4), pp. 692-724.
- 18. Liu, A.M., Shuibo, Z. and Meiyung, L. (2006). A framework for assessing organisational culture of Chinese construction enterprises, *Engineering Construction and Architectural Management*, 13 (4), pp. 327-342.
- 19. Luthans, F., Norman, S.M., Avolio, B.J. and Avey, J.B. (2008). Supportive climate and organizational success: The mediating role of psychological capital, *Journal of Organizational Behaviour*, 29, pp. 219-238.
- 20. Luthans, F. and Peterson, S. (2002). Employee engagement and manager self-efficacy implications for managerial effectiveness and development, *Journal of Management Development*, 21 (5/6), pp. 376-387.

- 21. Marczyk, G., DeMatteo, D. and Festinger, D. (2005). Essentials of research design and methodology, Hoboken, John Wiley and Sons, Inc.
- 22. Martins, E., Martins, N. and Terblanche, F. (2004). An organisational culture model to stimulate creativity and innovation in a university library, *Advances in Library Administration and Organisation*, 2, pp.83-130.
- 23. Martins, N. (1989). Organisasiekultuur in 'n finansiële instelling (Organisational culture in a financial institution) (Unpublished doctoral thesis), Pretoria, University of Pretoria.
- 24. Martins, N. (2014). Factorial invariance of the South African culture instrument, *Problems and Perspectives in Management* (Special Issue: South Africa), 4, pp. 242-252.
- 25. Martins, N. and Coetzee, M. (2007). Organisational culture, employee satisfaction, perceived leader emotional competency and personality type: An exploratory study in a South African engineering company, *South African Journal of Human Resource Management*, 5 (2), pp. 20-32.
- 26. Martins, N. and von der Ohe, H. (2006). Detecting sub-cultures in an organisation, *South African Business Review*, 10 (2), pp. 130-149.
- 27. Maslach, C. and Leiter, M.P. (1997). The Truth about burnout, San Francisco, Jossey-Bass.
- 28. Odendaal, A. and Roodt, G. (1998). Corporate culture and participation: Independent constructs? *Journal of Industrial Psychology*, 24 (3), pp. 14-21.
- 29. Ostroff, C., Kinicki, A.J. and Muhammad, R.S. (2013). Organizational culture and climate. In N. Schmitt, S. Highhouse and I. Weiner (Eds.). *Handbook of Psychology* (2nd ed., Vol. 12), Hoboken, NJ, John Wiley and Sons, pp. 643-676.
- 30. Ott, J.S. (1989). The organisational culture perspective, Chicago, Dorsey Press.
- 31. Ouchi, W.G. (1981). *Theory Z: How American business can meet the Japanese challenge*, Reading, Mass, Addsin-Wesley.
- 32. Peters, T.J. and Waterman, R.H. (1982). *In search of excellence: Lessons from America's best-run companies*, New York, NY, Harper and Row.
- 33. Pettigrew, A. (1979). On studying organisational culture, Administrative Science Quarterly, 24, pp. 570-581.
- 34. Rich, B., Lepine, J.A. and Crawford, E. (2010). Job engagement: Antecedents and effects on job performance, *Academy of Management Journal*, 53 (3), pp. 617-635.
- 35. Saks, A.M. (2006). Antecedents and consequences of employee engagement, *Journal of Managerial Psychology*, 21 (7), pp. 600-619.
- 36. Salanova, M. and Schaufeli, W.B. (2008). A cross-national study of work engagement as a mediator between job resources and proactive behaviour, *The International Journal of Human Resource Management*, 19 (1), pp. 116-131.
- 37. Schaufeli, W.B., Salanova, M., Gonźalez-Romá, V. and Bakker, A.B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach, *Journal of Happiness Studies*, 3, pp. 71-92.
- 38. Schaufeli, W. and Salanova, M. (2011). Work engagement: On how to better catch a slippery concept, *European Journal of Work and Organisational Psychology*, 20 (1), pp. 39-46.
- 39. Schein, E.H. (1985). Organisational culture and leadership: A dynamic view, San Francisco, CA, Jossey-Bass.
- 40. Schein, E.H. (1990). Organisational culture, American Psychologist, 45 (2), pp. 109-119.
- 41. Schneider, B. (2000). The psychological life of organisations. In N. Ashkanasy, C. Wilderom and M. Peterson (Eds.). *Handbook of organizational culture and climate* (pp. xvii-xxi). Thousand Oaks, CA, Sage.
- 42. Shuck, B., Reio, T. and Rocco, T. (2011). Employee engagement: An examination of antecedent and outcome variables, *Human Resource Development International*, 14 (4), pp. 427-445.
- 43. Silverthorne, C. (2004). The impact of organisational culture and person-organisation fit on organisational commitment and job satisfaction in Taiwan, *Leadership Organisation Development Journal*, 25, pp. 592-599.
- 44. Sonnetag, S. (2003). Recovery, work engagement, and proactive behaviour: A new look at the interface between non-work and work, *Journal of Applied Psychology*, 88, pp. 518-528.
- 45. Sonnentag, S. (2011). Research on work engagement is well and alive, *European Journal of Work and Organizational Psychology*, 20 (1), pp. 29-38.
- 46. Storm, K. and Rothman, I. (2003). A psychometric analysis of the Utrecht Work Engagement Scale in the South African police, *South African Journal of Industrial Psychology*, 29 (4), pp. 62-70.
- 47. Tagiuri, R. and Litwin, G. (Eds.) (1968). Organisational climate: Explorations of a concept, Boston, Harvard Business School.
- 48. Wildermuth, C. and Pauken, P.D. (2008). A perfect match: Decoding employee engagement Part II: Engaging jobs and individuals, *Industrial and Commercial Training*, 40, pp. 206-210.