

Sense of coherence, affective wellbeing and burnout in a South African higher education institution call centre

by Nisha Harry^{*} and Melinde Coetzee^{**}

Abstract

The high levels of absenteeism and turnover due to the incidence of high stress levels in the higher education call centre environment have led to renewed interest in measuring call centre agents' work-related wellbeing. The objectives of the study were to: (1) assess the overall wellness climate profile of a sample of higher education call centre employees for national benchmarking purposes; (2) explore the relationship between the participants' sense of coherence, affective wellbeing and burnout (measured by the South African Employee Health and Wellness Survey); and (3) determine how the participants differ regarding these variables in terms of gender, race, age and marital status. A quantitative survey was conducted on a convenience sample (n = 102) of call centre employees working in a full-time capacity in a South African higher education institution. The results indicated a risky wellness climate as compared to the national norm. Correlational statistics revealed significant associations between the participants' sense of coherence, affective wellbeing and burnout levels. Multiple regression analyses indicated sense of coherence and burnout as significant predictors of the participants' affective wellbeing. Significant differences regarding these variables were also detected between males and females and the various marital status groups. The findings contribute valuable new knowledge to the field of employee wellness that can be used to improve the work-related wellbeing of employees in the South African higher education call centre environment.

Key words: *affective wellbeing, burnout, call centre, sense of coherence, wellness climate*

1 Introduction

Higher education call centre personnel face numerous challenges that lead to high-risk profiles characterised by high levels of turnover, burnout and impaired presenteeism (Rothmann 2009). The high levels of impaired presenteeism and turnover, and low morale due to the incidence of high stress levels in the call centre environment, have led to a renewed interest in measuring call centre agents' work-related wellbeing (Harry 2011). Although research has indicated that occupational stress in call centres is particularly high (Rothmann 2009), very little research has been conducted on the

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work-related wellbeing of call centre employees in the South African higher education environment.

A call centre refers to a work environment in which the main business is mediated by computer and telephone-based technologies that enable the efficient distribution of incoming calls to available staff (Holman 2005). Call centres have become a very popular method of service delivery to students and other stakeholders in the higher education environment, mostly because of financial benefits (Visser & Rothmann 2008) and the elimination of extensive branch networks with face-to-face service (Briggs 1998).

Call centre work is regarded as being more stressful than any other comparable form of employment (Holman 2004). Occupational stress is associated with an increase in stress outcomes such as job dissatisfaction, ill-health, absenteeism, higher turnover and lower productivity (Tytherleigh 2003). In comparison to the average turnover ($\leq 49\%$) in all call centres in the UK (Malhotra & Mukherjee 2004), and in relation to other office-type working conditions, call centre turnover rates appear to be above average ($> 50\%$) in South Africa (Visser & Rothmann 2008).

The merging of higher education institutions with other educational institutions has created a huge volume of clients and as a result the personnel at many call centres have to work overtime. A call centre representative may speak to between 60 and 250 clients per eight-hour shift (Dieckhoff, Freigang-Bauer, Shröter & Viereck 2002). With an increased clientele base, call centre agents experience work overload which is directly related to high levels of emotional exhaustion. Emotional exhaustion was found to be a strong predictor of turnover intentions (Visser & Rothmann 2008). The constant monitoring of call centre employees (Holman 2004), which can be used as a punitive measure to increase performance (Holdsworth & Cartwright 2003), is regarded as a job demand on its own. Call centre work is seen as monotonous and this experience of monotony has been indicated as one of the reasons for the high turnover in call centres (Zapf, Isic, Bechtoldt & Blau 2003). Presenteeism is another challenge faced by call centre personnel. Employees go to work and overcommit despite complaints and ill health, which results in reduced focus on their work and lowered productivity (Rothmann 2009).

According to Rothmann (2009), call centre employees in higher education call centre environments often experience a lack of personal resources which is indicative of lower resilience levels. Imbalance between job demands on the one hand and job and personal resources on the other is the result of a demanding work environment. Burnout and mental distance are often associated with the high-risk profiles of call centre representatives (Rothmann 2009), often leading to the manifestation of serious physical and psychological ill-health. According to studies by Viljoen and Rothmann (2009), ill-health manifests as a result of burnout. Maslach and Leiter (1997) also found that the environment within which individuals have to perform their jobs is more related to burnout than are personal factors. As a result of the environment they create, call centres have been given different names, such as "satanic mills" and "mines of the 21st century" (Deery & Kinnie 2004; Taylor & Bain 1998).

2 Research objectives

The objectives of the study were to: (1) assess the overall wellness climate risk profile of a sample of higher education call centre employees for national benchmarking

purposes; (2) explore the relationship between the participants' sense of coherence, affective wellbeing and burnout; and (3) determine how the participants differ regarding these variables in terms of gender, race, age, and marital status.

Apart from a study conducted by Rothmann (2009), no South African studies reporting on the overall wellness climate and the relationship between the sense of coherence, affective wellbeing and burnout of higher education call centre employees were found. In the light of the paucity of research in the higher education call centre environment, the purpose of this study was to generate new knowledge in the field of employee wellness that can be used to improve the work-related wellbeing of employees in the South African higher education call centre environment.

3 Wellness climate

The South African Employee Health and Wellness (SAEHW) model (Rothmann 2009) has been successfully used in the call centre environment to measure the work-related wellbeing of employees. According to Rothmann and Rothmann (2006: 25), employee health and wellness can be defined as a state in which employees are energetic, motivated, healthy, productive and committed to the organisation and its goals. The SAEHW model explains the interaction between various factors that influence the overall work-related wellbeing of individuals. These factors comprise the following: the organisational climate (influenced by job demand factors and factors relating to job resources); personal resources (sense of coherence or resilience); the wellness climate (influenced by individuals' burnout levels and affective wellbeing); individuals' health and organisational commitment (influenced by factors such as their physical and psychological ill health, affective and behavioural commitment), individuals' perceptions of bullying, and their financial wellbeing.

Measuring individuals' performance on each of the various SAEHW factors provides an overall risk profile which can be used for internal and external benchmarking purposes (Rothmann 2009). The focus of the present study is confined to the overall wellness climate or morale (individuals' energy at and identification with their work as measured by their levels of burnout (exhaustion and mental distance), and affective wellbeing (vitality and work devotion). The study also focuses on the personal resources of individuals, that is, their sense of coherence as a measure of their resilience in coping with stress.

Lindley and Joseph (2004) found that wellness and affective wellbeing go beyond the absence of ill health and include aspirations to learn, be reasonably independent and possess confidence. Reardon (1998:117) defines wellness as "a composite of physical, emotional, spiritual, intellectual, occupational and social health", adding that "health promotion is the means to achieve wellness". Wellness goes beyond the stereotyped idea of health as an absence of illness. It implies a proactive stance towards achieving optimal physical, mental and emotional wellbeing.

The overall wellness and emotional wellbeing of employees are an asset to employers, who spend substantial sums of money on hiring employees in an attempt to generate profits and retain loyal customers (Sieberhagen, Rothmann & Pienaar 2009). The ability to promote overall wellness and emotional wellbeing rather than placing strain on employees and possibly contributing to mental illness is of considerable benefit to both employers and employees as employees' satisfaction with their work and workplace affects their citizenship at work, turnover rates and performance ratings (Harter, Schmidt & Keyes 2003).

4 Sense of coherence

In Rothmann's (2009) SAEHW model, sense of coherence is regarded as an indicator of resilience. Sense of coherence has been defined as a relatively stable disposition (Antonovsky 1987). It is possible that individuals with a weak sense of coherence will develop burnout, while those who have developed a strong sense of coherence will show affective wellness. Studies (Antonovsky 1987; Rothmann 2003) have confirmed that a person's sense of coherence is an important component of an individual's health and wellbeing. Each person's sense of coherence requires certain inherent prerequisites for successful coping, which are represented by the concepts of comprehensibility, manageability and meaningfulness (Antonovsky 1987).

Comprehensibility refers to the extent to which people experience or structure their world as one that is understandable, meaningful, orderly and consistent instead of chaotic, random and unpredictable. Manageability refers to the extent to which people experience the events of life as situations that are endurable or manageable or possibly even as challenges. Meaningfulness refers to the extent to which people feel that life makes sense on an emotional and not just on a cognitive level, and that life's demands are worthy of commitment (Rothmann 2009).

5 Affective wellbeing

Affective wellbeing is focused on vitality and work devotion, both of which characterise work engagement (Rothmann 2009). Vitality refers to individuals being willing to invest high levels of energy, vigour and resilience in their jobs without becoming easily fatigued, and persisting in the face of difficulties. Work devotion occurs when individuals display strong involvement in their work, accompanied by feelings of enthusiasm and significance, and by a sense of pride and inspiration. Individuals who feel highly devoted to their work generally experience psychological meaning and safety at work and will therefore avail efforts at a psychological and behavioural level in the work environment (Rothmann 2009).

Engagement (or work devotion) is viewed as the positive antithesis of burnout. This provides a new perspective on interventions aimed at alleviating burnout (Maslach, Schaufeli & Leiter 2001) and promoting healthy perceptions, beliefs and physical wellbeing (Salovey, Rothmann, Detweiler & Steward 2000). According to Nelson and Simmons (2003), meaningful work leads to eustress, which promotes engagement or work devotion even if the situation is demanding. Eustress reflects the extent to which cognitive appraisal of the situation is seen to either benefit or enhance an individual's wellbeing. Positive work-related wellbeing involves engaging individuals in meaningful work and improving the quality of their lives, health and psychological strengths in proactive and positive ways as members of a community and as employees (Witmer & Sweeney 1992).

6 Burnout

Burnout is viewed as a complex psychological syndrome which arises in response to chronic interpersonal stressors on the job. Burnout is characterised by exhaustion and mental distance. Exhaustion is the most obvious manifestation of the burnout syndrome (Maslach et al 2001). Exhaustion refers to feelings of being overextended and drained of emotional and physical resources (Buys & Rothmann 2010). Exhaustion occurs when the emotional demands of the job exhaust an individual's capacity to be involved

with, and responsive to, the needs of others. Exhaustion leads to inability by an individual to perform because he or she feels drained of all energy (Maslach et al 2001). Mental distancing occurs when an individual is no longer willing to perform, because of an increased intolerance of any effort (Buys & Rothmann 2010). Mental distancing is regarded as a coping strategy for dealing with stress and is characterised by a psychological withdrawal from the task (Schaufeli & Bakker 2003).

7 The relationship between sense of coherence, affective wellbeing and burnout

Sense of coherence, affective wellbeing and burnout have been related to occupational stress (Bezuidenhout 2008). Employees' levels of burnout and affective wellbeing determine the overall wellness climate of a work environment (Rothmann 2009). Research by Bezuidenhout and Cilliers (2010) showed that burnout, work engagement and sense of coherence of female academics are significantly related. Research also indicated that burnout is significantly negatively related to individuals' sense of coherence and work engagement (Bezuidenhout & Cilliers 2010; Hyvönem, Feldt, Salmela-Aro, Kinnunen & Máikangas 2009).

According to Feldt (1997), as an individual's sense of coherence strengthens over time it can decrease levels of burnout. Antonovsky (1987) stated that a person with a strong sense of coherence can select a particular coping strategy that seems most appropriate for dealing with the stressors confronting him or her. Consequently, the availability of a wide repertoire of coping strategies and flexibility in choice at any given time is crucial (Van der Colff & Rothmann 2009). The stronger a person's sense of coherence, the better his or her ability to employ cognitive, affective and instrumental strategies that are likely to improve coping and, consequently, affective wellbeing.

8 Research design

8.1 Participants

The participants consisted of a convenience sample of 102 call centre agents from a total population of 138 call centre employees employed in a full-time capacity at a higher education institution. The sample of participants (n = 102) consisted of 15% whites and 85% blacks (75% Africans, 6% coloureds, 4% Indians). The sample can also be broken down into 73% females and 27% males. In terms of age, the participants were predominantly in their early life/career stage with 12% being in the exploration phase of their careers (25 years and younger), 76% in the establishment phase of their careers (26-44 years), and 12% in the maintenance phase of their careers (45 years and older). In terms of marital status the percentages were as follows: 4% divorced, 37% married, 58% single, and 1% widowed. Ten percent of the sample (n = 10) held the position of supervisor; other participants held the following posts: 6% College Coordinators, 2% Contact Centre Analysts, 76% Contact Centre Consultants, and 6% Quality Assurance and In-House Trainers.

8.2 Measuring instrument

The South African Employee Health and Wellness Survey (SAEHWS) developed by Rothmann (2009) was used for the purposes of the present study. The SAEHWS contains 22 subscales. Only the subscales relating to sense of coherence (consisting of a one factor scale - 13 items), affective wellbeing (consisting of two subscales

measuring vitality and work devotion - 10 items), and burnout (consisting of two subscales measuring exhaustion and mental distance - 9 items) were used to achieve the objectives of the present study. Responses on each component are scored on a ten-point scale, ranging from low (1) to high (10). For the purposes of benchmarking the overall wellness climate against the climate at other South African institutions, respondents' scores are provided in a sten (standardised ten) format, with an average of 5.50 and a standard deviation of 2 (Rothmann 2009).

Respondents' scores on the subscales are interpreted as follows: 1–3 (= below average), 4–7 (= average), and 8–10 (= high). Studies by Rothmann (2009) showed that the factor structures of the SAEHWS are equivalent for different ethnic groups and organisations. In terms of reliability, the internal consistency (Cronbach's alpha coefficients) of the five subscales used for the purposes of the present study was highly acceptable. The scores were as follows: sense of coherence (0.77); affective wellbeing (vitality = 0.83; work devotion = 0.87); and burnout (exhaustion = 0.86; mental distance = 0.74). Exploratory and confirmatory factor analyses by Rothmann (2009) confirmed the construct validity of the SAEHWS.

8.3 Research procedure

Ethical clearance and permission to conduct the study were obtained from the management and Research Ethics Committee of the higher education institution that participated in the study. Participation was voluntary and employees were requested to complete the questionnaire on-line. The purpose of the research was explained and the participants were assured of confidentiality and anonymity, and told that participation was voluntary. Informed consent was obtained from the participants. The questionnaires were scored electronically.

8.4 Statistical analyses

The Statistical Program for Social Sciences (SPSS 2008) was used to analyse the data. Descriptive statistics, correlational and inferential statistics were calculated. Cronbach's alpha coefficients were used to assess the internal consistency of the measuring instrument. The sten scores (Rothmann 2009) were used to benchmark the overall wellness climate profile of the call centre against national samples. The South African wellness climate norm was set at 5.50 as determined by Rothmann (2009). Pearson product-moment correlations were calculated to assess the direction and strength of the relationships between the variables. In order to counter the probability of a type 1 error, the significance value was set at the 95% confidence interval level ($p \leq 0.05$). For the purposes of this study, r values greater than 0.30 (medium effect) (Cohen 1992) were regarded as practically significant.

Standard multiple regression analyses were conducted to identify whether the sense of coherence and burnout variables significantly explain or predict the portion of the total variance in the scores of the dependent variable (the affective wellbeing variable). The value of the adjusted R^2 was used to interpret the results. The F-test was used to test whether there was a significant regression between the independent and the dependent variables. For the purposes of this study, R^2 values greater than 0.13 (medium effect) were regarded as practically significant (Cohen 1992).

The Mann-Whitney U test was used to test for significant mean differences between the male and female participants. The Kruskal-Wallis test was performed to test for

significant mean differences between the various race, age and marital status groups ($p \leq 0.05$).

9 Results

9.1 Descriptive statistics

The means, standard deviations and Cronbach's alpha coefficients of each of the three subscales of relevance to the present study are presented in table 1. High internal consistency reliabilities were obtained for the subscales. Table 1 shows that the participants obtained average scores on the three variables, with burnout scoring the highest ($M = 6.52$; $SD = 2.17$). A participant's overall score on burnout is obtained by combining his or her scores on exhaustion and mental distance (Rothmann 2009). In terms of affective wellbeing, a participant's overall score is obtained by combining his or her scores on vitality and work devotion (Rothmann 2009).

Table 1
Means, standard deviations and Cronbach's alpha coefficients

Variables	Mean	SD	Cronbach's alpha coefficient
Sense of coherence	4.86	2.79	0.77
Affective wellbeing	4.79	2.58	0.89
Burnout	6.52	2.17	0.90

9.2 Benchmarked overall wellness climate risk profile

For the purpose of determining the participants' overall wellness risk profile as presented in figure 1, the participants' scores on the exhaustion and vitality subscales represent their energetic wellness, while their scores on the subscales of mental distance and work devotion represent their motivational wellness (Rothmann 2009). Overall, the participants' levels of vitality (5.41), work devotion (4.75) and sense of coherence (4.91) are lower than the South African wellness climate norm (5.50).

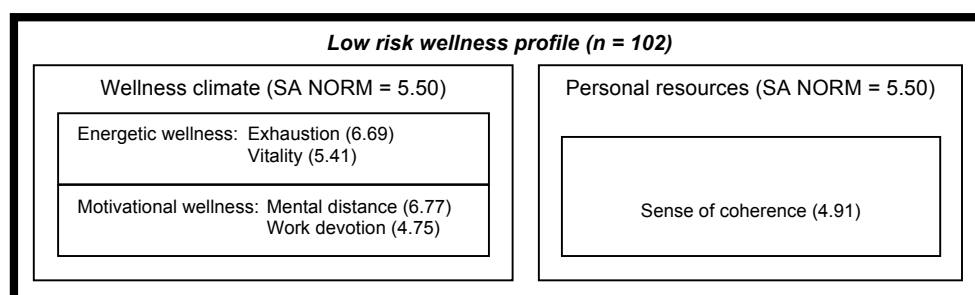


Figure 1

Sten scores on the affective wellbeing, burnout and sense of coherence subscales as against the South African wellness climate norm ($n = 102$)

Overall, the wellness climate (table 2) and sense of coherence (resilience) levels (table 3) evident for the higher education call centre sample seem to be inferior compared to most industries and occupational groups in the external benchmark; but they are somewhat better than a call centre sample in the financial and banking industry. The

participants' levels of exhaustion, mental distance, vitality and work devotion were also benchmarked against the profiles of other South African organisations (Rothmann 2009). As shown in table 2, the higher education call centre participants scored relatively lower on vitality and work devotion (affective wellbeing) than participants from most industries and occupational groups in the external benchmark, but somewhat better than the call centre sample in the financial and banking industry. The higher education call centre participants scored relatively higher on exhaustion and mental distance (burnout) than participants from most industries and occupational groups in the external benchmark, but somewhat better than the call centre sample in the financial and banking industry.

Table 2
Participants' affective wellbeing and burnout mean scores compared to other South African organisations (SA Sten) (based on Rothmann 2009)

Organisation	Exhaustion	Mental distance	Vitality	Work devotion
	BURNOUT		AFFECTIVE WELLBEING	
Higher education institution	6.69	6.77	5.41	4.75
Call centres in the Fin & Bank Industry	7.09	6.98	4.72	3.78
A sample of call centre operators	6.86	6.91	5.58	5.63
Financial industry	5.71	4.86	6.70	6.04
Government department	6.49	6.04	6.23	5.89
Insurance industry	6.61	6.38	5.15	4.60
Manufacturing industry	5.90	5.69	6.49	5.81
Engineers	5.34	4.95	6.09	5.62
Primary school educators	5.68	5.68	6.10	6.83
Secondary school educators	7.02	6.82	5.27	5.40
Educators (universities)	6.29	5.56	5.56	5.64
Support staff – universities	5.74	5.36	5.11	5.27
Correctional officers	5.44	6.15	4.88	5.70
Police officers	5.06	5.56	5.82	5.67
Staff members – Univ. of Technology	5.90	5.78	4.80	5.18
Train drivers	4.02	4.38	7.48	7.96
Professional nurses	5.72	5.44	5.56	5.64
Production supervisors	6.42	5.94	6.36	6.28
Emergency health technicians	6.85	8.06	4.95	5.54
Pharmacists	5.79	6.03	4.82	4.30
Non-professional counsellors	4.10	4.48	6.81	6.17

Table 3
Participants' sense of coherence (resilience) levels compared to those of other South African occupational groups (SA Sten)

Occupational group	Sense of coherence (Resilience)
Academics (HEIs)	6.66
Engineers	8.17
Manufacturing	5.75
Education (schools)	-
Correctional officers	-
Government departments	5.48
Insurance industry	7.09
Financial industry	7.07
Call centres in the Financial & Bank Industry	4.38
Higher education institution N=102	4.91

As shown in figure 3, out of the total sample ($n = 102$), 49 participants (48%) were identified as high-risk cases. The high-risk group was identified by means of their overall wellness outcomes, that is, exhaustion and mental distance (burnout), and vitality and work devotion (affective wellbeing). The 49 high-risk cases were removed from the database to generate a risk profile for the low-risk cases in order to portray the experiences of the participants without the distortion provided by the high-risk cases. The scores of the participants were standardised and the profiles of the two risk groups were compared with the South African norm (Rothmann 2009). A comparison of the risk profiles of the high-risk cases ($n = 49$) and the low-risk cases ($n = 53$) is reflected in figures 2 and 3. The risk profile of the ten supervisors is provided in figure 4.

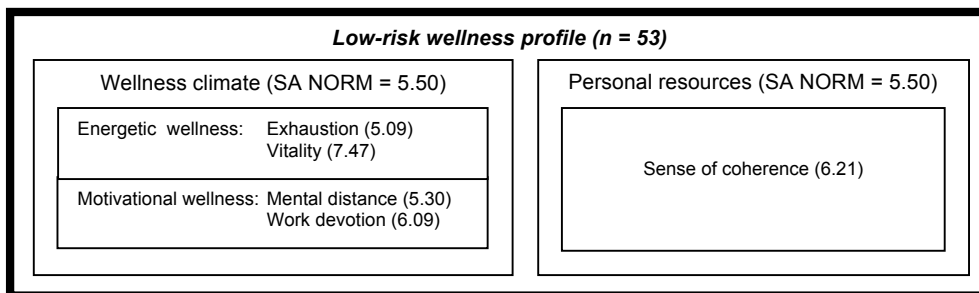


Figure 2
Sten scores on the affective wellbeing, burnout and sense of coherence subscales as against the South African norm: low-risk cases ($n = 53$)

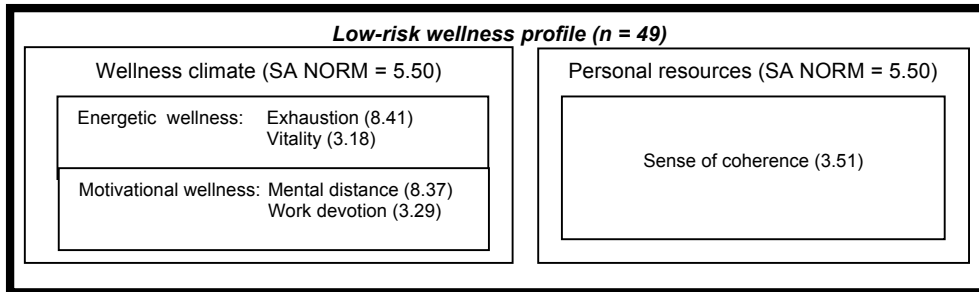


Figure 3
Sten scores on the affective wellbeing, burnout and sense of coherence subscales as against the South African norm: high-risk cases (n = 49)

Figure 2 shows that the exhaustion (5.09) and mental distance (5.30) levels of the low-risk cases are below the South African norm (5.50) while their vitality (7.47) and work devotion (6.09) levels and their sense of coherence (6.21) or resilience levels are higher than the South African norm (5.50). In terms of the high-risk cases (shown in figure 3), the exhaustion (8.41) and mental distance (8.37) of the high-risk cases are higher than the South African norm (5.50). The vitality (3.18) and work devotion (3.29) levels and the sense of coherence or resilience (3.51) levels of the high-risk cases are lower than the South African norm (5.50).

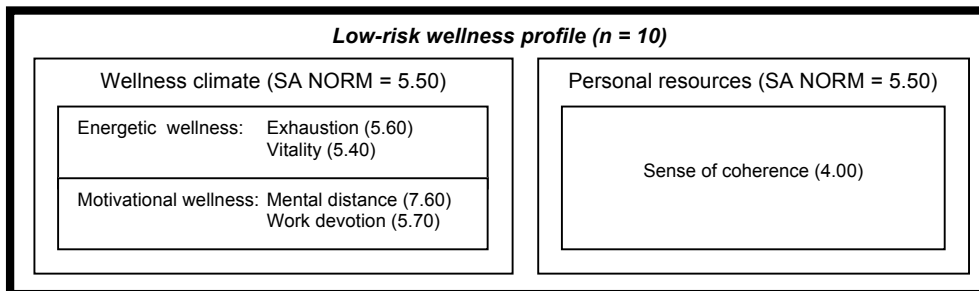


Figure 4
Sten scores on the affective wellbeing, burnout and sense of coherence subscales as against the South African norm: supervisor cases (n = 10)

Figure 4 shows that the supervisors scored lower than the South African norm (5.50) on vitality (5.40) and sense of coherence (4.00), and higher than the South African norm on exhaustion (5.60), mental distance (7.60) and work devotion (5.70).

9.3 Correlations between sense of coherence, affective wellbeing and burnout

Table 4 shows that the sense of coherence variable correlates significantly and positively with the affective wellbeing variable ($r = 0.44$; $p \leq 0.01$; medium practical effect size) and negatively with the burnout variable ($r = -0.51$; $p \leq 0.01$; large practical effect size).

Table 4
Intercorrelations between sense of coherence, affective wellbeing and burnout (n = 102)

Variables	Sense of coherence	Affective wellbeing	Burnout
Sense of coherence	1	0.44** ++	-0.51** ++
Affective wellbeing	0.44** ++	1	-0.67** +++
Burnout	-0.51** +++	-0.67** +++	1

** $p \leq 0.01$ (2-tailed); ++ $r = \geq 0.30 \leq 0.49$ - medium practical effect size;
 +++ $r \geq 0.50$ - large practical effect size

9.4 Inferential statistics: Multiple regression analysis

In terms of the two variables (sense of coherence and burnout) entered in the regression equation, Table 5 shows that only the burnout variable in the regression model explained a significant large ($R^2 = 45\%$) practical effect percentage of variance in the affective wellbeing variable. Whereas the burnout variable contributed significantly and negatively to explaining the variance in the affective wellbeing variable, the sense of coherence variable had no significant effect on the affective wellbeing variable.

Table 5
Multiple regression analysis: Sense of coherence and burnout (independent variables) on affective wellbeing (dependent variable) (n = 102)

Variables	Unstandardised coefficient		Standardised coefficient	T	P	F	Adjusted R^2	R
	B	SE	B					
Constant	8.79	0.95		9.29	0.00	41.44 (2,98)	0.45*** +++	0.68
Sense of coherence	0.13	0.08	0.14	1.62	0.11			
Burnout	-0.71	0.10	-0.60	-6.92	0.00			

*** $p \leq 0.001$; +++ $R^2 \geq 0.26$ (large practical effect size)

9.5 Inferential statistics: tests for significant mean differences

9.5.1 Gender

Table 6 shows that the male and female participants differed significantly only in terms of their affective wellbeing and burnout levels. The males obtained significantly higher scores than the female participants on the affective wellbeing variable ($M = 5.67$; $SD = 2.77$ versus $M = 4.47$; $SD = 2.07$). The female participants scored significantly higher than the male participants on the burnout variable ($M = 6.81$; $SD = 2.07$ versus $M = 5.74$; $SD = 2.26$).

Table 6
Mann-Whitney U test: Significant mean differences (gender) (n = 102)

	Sense of coherence	Affective wellbeing	Burnout
Mann-Whitney test	9.10	7.40	7.30
Wilcoxon W	3.90	3.52	1.11
Z	-0.70	-0.20	-0.20
Asymp Sig (2-tailed)	0.49	0.05*	0.04*
	Mean (SD)	Mean (SD)	Mean (SD)
Male	5.15 (2.77)	5.67 (2.77)	5.74 (2.26)
Female	4.76 (2.80)	4.47 (2.44)	6.81 (2.07)

* $p \leq 0.05$

9.5.2 Race

Table 7 shows that the various racial groups did not differ significantly regarding their sense of coherence, affective wellbeing and burnout levels.

Table 7
Kruskal-Wallis test: Significant mean differences (race) (n=102)

	Sense of coherence	Affective wellbeing	Burnout
Chi-square	0.45	4.44	2.55
Df	2	2	2
Asymp Sig (2-tailed)	0.80	0.11	0.28

* $p \leq 0.05$

9.5.3 Age

Table 8 shows that the various age groups did not differ significantly regarding their sense of coherence, affective wellbeing and burnout levels.

Table 8
Kruskal-Wallis test: Significant mean differences (age) (n = 102)

	Sense of coherence	Affective wellbeing	Burnout
Chi-square	0.40	2.53	0.98
Df	2	2	2
Asymp Sig (2-tailed)	0.82	0.28	0.61

* $p \leq 0.05$

9.5.4 Marital status

Table 9 shows that the various marital status groups differed significantly regarding their sense of coherence and affective wellbeing levels. The married participants obtained significantly higher scores on sense of coherence than the single participants ($M = 5.76$; $SD = 3.12$ versus $M = 4.32$; $SD = 2.49$). The married participants obtained significantly higher scores on affective wellbeing than single participants ($M = 5.54$; $SD = 2.63$ versus $M = 4.39$; $SD = 2.42$). The single participants obtained significantly higher scores on burnout than married participants ($M = 6.76$; $SD = 2.01$ versus $M = 6.03$; $SD = 2.35$). The widowed group obtained significantly higher scores on sense of coherence and affective wellbeing than the single, married or divorced participants.

Table 9
Kruskal-Wallis test: Significant mean differences (marital status) (n=102)

	Sense of coherence	Affective wellbeing	Burnout
Chi-square	6.2	5.95	3.4
Df	2	2	2
Asymp Sig (2-tailed)	0.05*	0.05*	0.18
	Mean (SD)	Mean (SD)	Mean (SD)
Single	4.32 (2.49)	4.39 (2.42)	6.76 (2.01)
Married	5.76 (3.12)	5.54 (2.63)	6.03 (2.35)
Widowed	8.00 (0.00)	8.00 (0.00)	4.00 (0.00)
Divorced	3.75 (0.96)	4.79 (2.57)	8.25 (1.26)

* $p \leq 0.05$

10 Discussion

The objectives of the study were to: (1) assess the overall wellness climate profile of a sample of higher education call centre employees for national benchmarking purposes; (2) explore the relationship between the participants' sense of coherence, affective

wellbeing and burnout; and (3) determine how the participants' differ regarding these variables in terms of gender, race, age, and marital status. In interpreting the results, the following characteristics of the sample were kept in mind: The sample of participants consisted predominantly of black single and married staff level females in their early career stage. Considering that a 74% response rate was achieved, the results may be generalised as being representative of the total population of the call centre employees of the higher education institution that participated in the study.

10.1 Overall wellness climate profile

Overall, the results indicated high burnout levels for the sample of call centre participants. The wellness risk profile also indicated high levels of exhaustion and mental distance (burnout). The findings are in line with those of Maslach, Schaufeli and Leiter (2001), who found burnout to be the response to overload, particularly in the exhaustion dimension. Mental distance is best predicted by emotional demands (Buys & Rothmann 2010). Research also indicates that burnout is a significant predictor of employee wellbeing. As confirmed by studies (Bezuidenhout 2008; Buys & Rothmann 2010; Maslach & Leiter 1997; Schaufeli & Enzman 1998), when people feel exhausted, they feel over-extended, both emotionally and physically, and are no longer able to give of themselves on a psychological level.

The benchmark results showed that the higher education call centre participants scored relatively lower on vitality and work devotion (affective wellbeing) and higher on exhaustion and mental distance (burnout) than participants from the other South African institutions. There is an ongoing debate on whether positive and negative affect represent different ends of a single dimension. With regard to work-related wellbeing, positive and negative work-related wellbeing share approximately 25% variance (Rothmann 2009). That is to say, exhaustion and vitality are not opposites and neither are mental distance and work devotion. The high scores for exhaustion and mental distance suggest that the participants are experiencing high exhaustion at work and are distancing themselves from their work. The usual cause is high job demands such as a high pace and amount of work, having to remember much detail and emotional demands (Rothmann 2009). According to Demerouti, Bakker, Nachreiner and Schaufeli (2001), burnout can develop when certain job demands are high and certain job resources are limited. Previous studies have confirmed this by showing that high job demands exhaust employees' mental and physical resources and therefore lead to depletion of energy (which is a state of exhaustion) and health problems (Bakker, Demerouti, De Boer & Schaufeli 2003; Bakker, Demerouti & Schaufeli 2003).

The lower scores on vitality and work devotion suggest that the participants are not currently experiencing high levels of energy at work and that they may not feel strongly attached to their jobs. Low levels of affective wellbeing usually imply a lack of resources, that is personal or job resources such as resilience (sense of coherence), social support, growth opportunities and resources required to get the job done. This could also lead to low organisational commitment and is regarded as a serious disengagement risk (Rothmann 2009).

In this study the results indicated that the overall wellness climate and sense of coherence (resilience) levels evident for the higher education call centre participants seem to be inferior compared to those encountered in most industries and occupational groups. Sense of coherence has a direct effect on work-related wellbeing and work-related health. It affects employees' perceptions and coping strategies. Sense of coherence combined with job stressors is related to exhaustion and mental distance

(Buys & Rothmann 2010; Schaufeli & Enzmann 1998). The findings of the present study are in agreement with those of Basson and Rothmann (2002) and Wissing, De Waal and De Beer (1992). Rothmann, Jackson and Kruger (2003) also found sense of coherence and job demands to be strongly related to exhaustion.

According to Hobfall (2000), burnout results when individuals fail to acquire sufficient resources. Two interpretations are possible for the observed significant relation between a weak sense of coherence and higher burnout levels. Firstly, the participants who have better and more resources seem to be less vulnerable to resource loss and more inclined to gain better resources. Conversely, those with fewer resources seem to be more vulnerable to resource loss and less able to gain resources. Sense of coherence is regarded as a broad-based resource, while burnout could be the result of a lack of resources. Secondly, in line with research conducted by Rothmann, Jackson and Kruger (2003), it is possible that the participants' sense of coherence had become weakened because of their high levels of burnout.

The higher education call centre employees' overall affective wellbeing was lower in comparison with that of most occupational groups in the external benchmark of call centres in South African organisations, but superior in comparison with the call centre sample in the financial and banking industry in South Africa. The overall risk of disengagement was found to be much higher in the higher education call centre in comparison with other call centres in South African organisations, reflecting a burnout propensity and lower morale (affective wellbeing). Overall, the results indicated a high-risk wellness climate for the higher education institution call centre group.

10.2 *The relationship between sense of coherence, affective wellbeing and burnout*

The findings of the present study are in line with those of previous studies, which showed a significant positive relationship between engagement (affective wellbeing) and sense of coherence, and a significant negative relationship between sense of coherence, affective wellbeing and burnout (Bezuidenhout & Cilliers 2010; Rothmann, Jackson & Kruger 2003; Rothmann, Steyn & Mostert 2005; Wissing, De Waal & De Beer 1992). The results further showed that the participants' burnout levels significantly predicted their affective wellbeing.

The significant positive relationship observed between the participants' sense of coherence and affective wellbeing suggests that the call centre participants may have a behavioural understanding of the demands of the job and the ability to manage them. In other words, the participants' high resilience levels (as represented by their sense of coherence) may have resulted in higher levels of affective wellbeing and vice versa. Studies by Bezuidenhout and Cilliers (2010) confirmed that a strong sense of coherence does indeed act as a buffer against the development of the pathogenic state of burnout. A strong sense of coherence moderates the effects of job stressors on exhaustion (Rothmann, Steyn & Mostert 2005). It therefore appears from the findings that call centre employees with a strong sense of coherence may be more likely to experience work engagement or affective wellbeing, which generally implies feelings of energy, resilience, persistence, enthusiasm and inspiration (Bezuidenhout & Cilliers 2010).

The results showed that the participants who indicated a weak sense of coherence (low resilience) as a personal resource had significantly higher burnout levels. Various researchers (Basson & Rothmann 2002; Wissing, De Waal & De Beer 1992) reported

significant negative correlations between burnout and sense of coherence. Notwithstanding this inverse relationship between sense of coherence and burnout, research has shown that it is possible that sense of coherence, as a “meaning-providing variable” (Strümpfer 2003), may help to ward off burnout, to recover from it, and probably to strengthen engagement inclinations. Individuals with a strong sense of coherence could also experience burnout but would probably even benefit from it in the long run. They are likely to use temporary conditions of anguish as an opportunity for growth and for reorganising their life and work circumstances with the aid of newly discovered life skills (Rothmann, Jackson & Kruger 2003).

The participants who indicated significantly higher levels of burnout also indicated significantly lower levels of affective wellbeing. They further indicated that they were experiencing significantly lower levels of vitality and feeling less devoted to their work, probably as a result of exhaustion and mental distancing. Exhaustion reflects indifference or a distant attitude towards work. Exhausted individuals view work as negative, and are callous or detached from various aspects of their work (Bezuidenhout & Cilliers 2010). It is noteworthy that the negative relationship between burnout and affective wellbeing is not absolute. Burnout and work engagement or affective wellbeing are negatively correlated but are not the exact opposites of each other (Bezuidenhout & Cilliers 2010; Schaufeli & Bakker 2003). It is theoretically possible for a call centre employee to feel burnt out but still experience the vitality and work devotion that characterise affective wellness and become engrossed in other aspects of the job. This may be because affective wellbeing is seen as a form of mental resilience and willingness to invest effort in one’s work, even in the face of adverse conditions (Rothmann 2009). Resilience is therefore an important aspect of the manifestation of affective wellbeing, as is also indicated by the significant positive relationship between sense of coherence (resilience) and affective wellbeing. Feldt (1997) states that people with a strong sense of coherence are likely to welcome challenges and to feel confident that they can handle them well. A strong sense of coherence could provide protection against burnout because sense of coherence starts to develop at an early stage of life, outside the work environment, and burnout only after an individual has been employed for some length of time (Strümpfer 2003).

The results showed that the call centre participants experienced high levels of exhaustion and mental distance and low levels of vitality and work devotion. The Job Demands-Resource (JD-R) model of Demerouti et al (2001) posits that job demands are associated with exhaustion, whereas job resources are associated with disengagement. Both high job demands and absence of job resources are contributors to burnout (Bezuidenhout & Cilliers 2010). Job demands (eg, physical demands, time pressure and shift work) are associated with exhaustion, whereas the lacks of job resources (eg, feedback, participation in decision-making and supervisory support) are associated with disengagement (Demerouti et al 2001). Studies in South Africa (Pretorius 1994; Storm & Rothmann 2003) confirmed that burnout is related to job demands. The risk profile presented in this study reveals that out of the total group of participants ($n = 102$), 49 (48%) participants were identified as high-risk cases, and that the exhaustion and mental distance of the higher risk cases are higher than the South African norm for call centres in South African organisations.

10.3 Differences between socio-demographic groups

Overall, the results indicated significant differences between only a number of the biographical variables and the wellness variables.

10.3.1 Gender

The male participants indicated significantly higher levels of vitality and work devotion (affective wellbeing), and significantly lower burnout levels than their female counterparts. Hobfall (2000) argues that women may have less access to resources that could buffer the negative effects of stress and maintain wellness. Females tend to experience higher levels of burnout than men. According to Maslach (1982), and as borne out by studies by Bezuidenhout (2008), men and women experience burnout in fairly similar degrees, but women tend to be more emotional than men and men tend to reveal more depersonalised and callous feelings about people they work with. Research conducted by Blix, Cruise, Mitchell and Blix (1994) revealed that women tend to experience a higher degree of burnout as they move up the ranks in organisations.

10.3.2 Race

No significant difference was found between race and the variables relevant in this study. Previous research by Bezuidenhout (2008) also revealed no significant differences between different population groups.

10.3.3 Age

Overall there were no significant differences between age groups in terms of the relevant variables. People develop a sense of coherence by the time they reach the age of 30 (Antonovsky & Sagy 1985).

10.3.4 Marital status

The widowed and married participants had a significantly stronger sense of coherence (resilience) and higher levels of affective wellbeing than those who were divorced. According to Maslach (1982), married people or providers with families experience lower burnout levels. Being in a permanent relationship moderates the effects of stress-inducing factors experienced in working life.

11 Conclusions, implications and recommendations

11.1 Conclusions and implications

The results provided valuable new insights regarding the manifestation of burnout in the higher education call centre environment. Overall, based on the benchmarking results, it can be concluded that the higher education call centre environment is a high-risk environment for inducing stress and high levels of burnout in call centre employees, as indicated in figure 5 below. The supervisors were also identified as a high-risk group. Higher levels of burnout in the higher education institution call centre environment may lead to a lowered sense of coherence, indicating that the observed high levels of burnout in the higher education institution call centre environment negatively influences the call centre employees' affective wellbeing. The results further indicated gender and marital status as important factors to consider in the design of employee wellness interventions in the higher education call centre environment.

The practical implications of the findings point to the implementation of employee wellness practices specifically designed for the higher education call centre environment. Figure 5 outlines a suggested employee wellness intervention framework for the higher call centre environment. As shown in figure 5, employee wellness interventions should attempt to strengthen both the sense of coherence and the affective wellbeing of call centre employees. Specific interventions should be tailored to lower the burnout levels of supervisors. Based on the results, it is suggested that higher

levels of sense of coherence may help to lower employees' levels of burnout. Interventions aimed at strengthening employees' sense of coherence or resilience could focus on building the personal resources of employees to enable them to deal positively with the demands and daily stressors they may encounter in the higher education call centre environment.

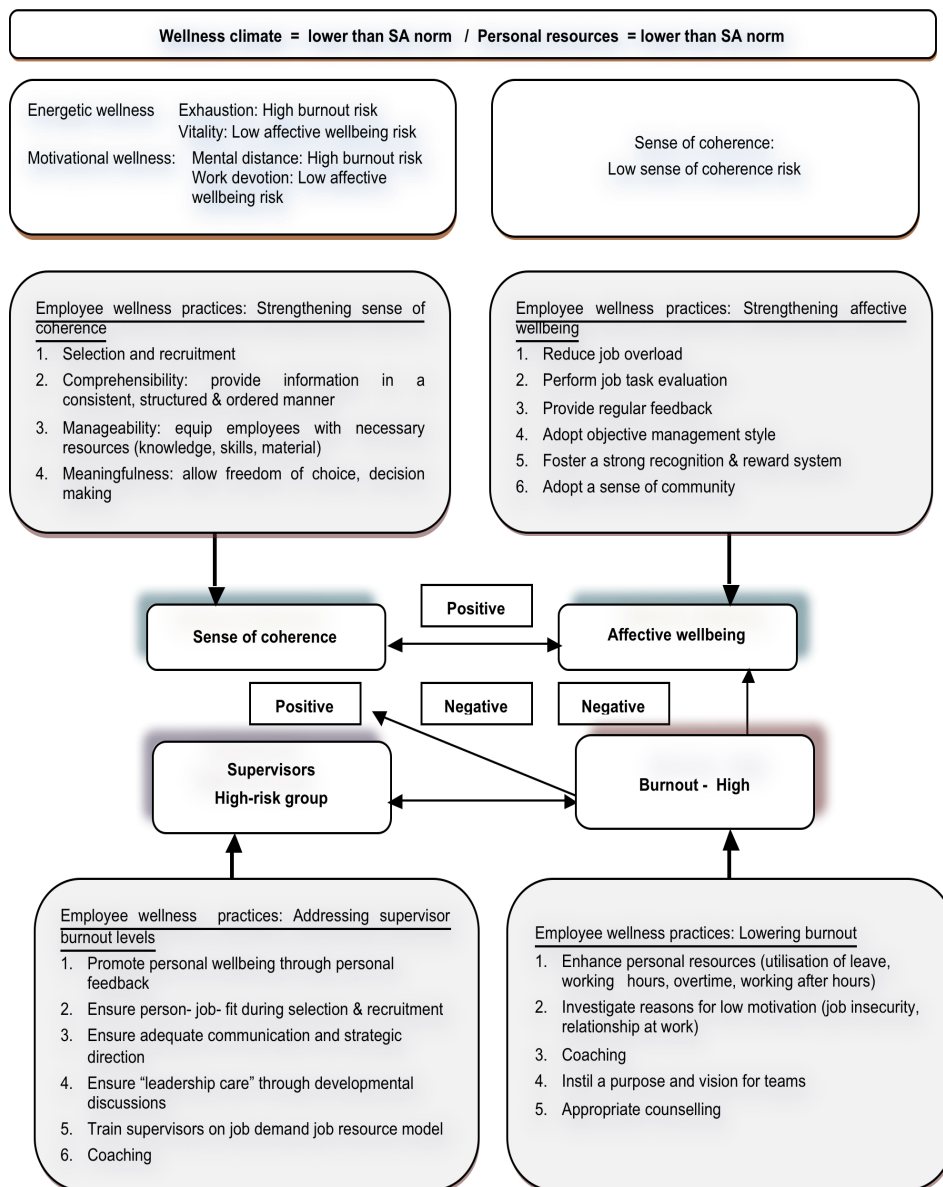


Figure 5
Overview and summary of core conclusions and recommended employee wellness practices

11.2 Recommendations

Since the present study has been limited to a relatively small sample of participants employed in the call centre of a South African higher education institution, the findings cannot be generalised to other industry contexts. Furthermore, given the exploratory nature of the research design, this study can yield no statements about causation. Associations between the variables have therefore been interpreted rather than established. It is also recommended that future research studies should incorporate all the variables included in the South African Employee Health and Wellness model of Rothmann (2009) to enable a more holistic framework for the design of employee wellness interventions in the higher education call centre environment.

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