Southern African Journal of Anaesthesia and Analgesia 2020; 26(2):83-90
https://doi.org/10.36303/SAJAA.2020.26.2.2359

South Afr J Anaesth Analg
ISSN 2220-1181 EISSN 2220-1173

ORIGINAL RESEARCH

Burnout and areas of work-life among anaesthetists in South Africa Part 2: Areas of work-life

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Introduction: The purpose of this two-part study was to determine the prevalence and severity of the burnout syndrome among South African anaesthetists working in the public and private sectors, and to identify areas of work-life (AWLs) that predispose to burnout. We reported our burnout findings in Part 1.[1] In this paper (Part 2) we report on the AWLs.
Methods: Invitations were e-mailed to 1 852 SASA members, requesting responses to a validated questionnaire, the *Areas of Worklife* Survey (Mindgarden Inc. Menlo Park, USA). The questionnaire results in scores for six AWLs that impact on the development of the burnout syndrome, namely *workload, control, reward, community, fairness* and *values.*
Results: 189 public sector and 309 private sector anaesthetists responded. 85% of public sector respondents worked in academic hospitals. The *values* AWL could not be properly assessed due to respondents' misinterpretations regarding that particular item. Compared to private sector, public sector anaesthetists had lower (i.e. more adverse) median scores for five AWLs. Greater proportions of public sector anaesthetists had low scores for the five AWLs. Correspondingly, smaller proportions of public sector anaesthetists had high (i.e. favourable) scores for w*orkload, control, reward,* and *fairness.*
Multivariable least squares regression analysis identified the following significant explanatory variables for the following burnout dimensions: For *emotional exhaustion* these were *workload, reward, community* and *control*. For *cynicism* they were *workload, reward, control, gender* and *years of experience*. Predictors for *efficacy* were *reward, community, control* and *years of experience*. Logistic regression analysis included *workload, reward* and *control* AWL as explanatory variables for a clinical diagnosis of burnout with *workload* the dominant variable.
Conclusions: Public sector anaesthetists experience more adverse AWLs than those in private practice. The most important factor appears to be excessive workload. Additionally, the *reward, community* and *control* AWLs are important determinants of anaesthetists' psychological relationships with their work.

Keywords: burnout-professional, anaesthesiologists-psychology, job satisfaction, work engagement, physician impairment, cross-sectional studies

> *"The experience of burnout is not simply exhaustion resulting from too much work. It reflects a crisis in which employees view the workplace to be at odds with their core values."*
>
> Michael Leiter et al., 2010[2]

Introduction

In Part 1 of this study we report on a survey in which we investigated the existence of the burnout syndrome among members of the South African Society of Anaesthetists (SASA).[1] In that article we concluded that the prevalence and severity of burnout among South African anaesthesia providers were too high, especially among employees in public sector hospitals. In this article (Part 2), we report our findings regarding our simultaneously conducted, parallel survey. The purpose was to identify particular aspects of SASA respondents' personal work experiences that are associated with the three dimensions* of the burnout syndrome, and which may contribute to the development of a clinical diagnosis of burnout. We employed the Areas of Worklife Survey, (Mindgarden Inc. Menlo Park, USA), a validated instrument that assesses the congruence between person and work environment.[3] This is done by means of a questionnaire that results in scores for each of the six areas of work-life (AWLs) that drive the development of the burnout syndrome. These are *workload, control, reward, community, fairness, and values*.[2-4] A more detailed description of these six aspects of work-life is given in the Appendix.

The main objectives were to:

1. Compare SASA members' averaged scores for each of the six AWLs with normative values derived from a pre-identified study.[3]
2. Compare scores for each of the six AWLs between anaesthetists working in the public and in the private sector.
3. Identify which AWLs among SASA members are the strongest contributors to the burnout syndrome.

Our hypotheses were that with regard to SASA respondents:

1. Areas of Worklife Scale scores would be more adverse than normative values.

* Emotional exhaustion, cynicism and efficacy

2. Public sector anaesthetists would return more adverse scores than private practitioners.
3. Excessive workload demands would be the strongest predictors of all three burnout dimensions (*emotional exhaustion, cynicism* and *efficacy*).
4. Excessive workload demands would be the strongest predictor for respondents whose burnout scores justify a diagnosis of being clinically burned out, according the *"Emotional Exhaustion+1"* principle.†[5]

Methods

The survey was conducted between July and September 2018. All SASA members with known e-mail addresses were invited to participate by following a link to a web-based questionnaire. The invitation assured anonymity, requested consent, and provided investigator contact details. By responding, participants granted consent for their responses to be used in the study. Responder bias and sensitisation to burnout was limited by excluding the word "burnout" in the invitation and presenting the study as a survey of job-related attitudes.

The Areas of Worklife questionnaire comprises 28 items that produce scores for each of the six AWLs that influence the burnout syndrome: these are *workload, control, reward, community, fairness, and values*. Each scale includes positively worded items, e.g. "I have enough time to do what's important in my job" (*workload*) and negatively worded items, e.g. "Favouritism determines how decisions are made at work" (*fairness*). Respondents indicate their degree of agreement with these statements on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). For each AWL, low scores (< 3) indicate possible mismatch between the person and the work environment and high scores (> 3) indicate congruence.

With regard to the *values* AWL, respondents were asked to identify the two main organisations within which they usually functioned. For anaesthetists working in public hospitals this was the hospital's management, and their anaesthetic department within the hospital. For private practitioners this was the management of the hospitals where they worked and their private practice organisations. Regarding public sector anaesthetists the intention was to determine firstly whether there was a mismatch or congruence between their own value systems and those of the hospital's management, and secondly between themselves and the hospital department within which they functioned. Likewise, regarding private practitioners we intended to determine whether a *values* congruence or mismatch existed firstly between themselves and the hospitals and secondly between themselves and their practice organisations.

The questionnaire also recorded socio-demographic data: gender, age group, years since qualification, public/private practice and qualification (specialist, trainee, diploma, general practitioner). Completed questionnaires were captured automatically and stored anonymously on a REDCap secure server (https://projectredcap.org/).

Data analysis

Data were downloaded into an Excel spreadsheet for analysis by statistical software.[6,7] We estimated the internal consistency of the questionnaire by calculating Cronbach's alpha.[8,9] We classified participants' scores for the six AWLs into high, moderate, or low categories, according to the scheme depicted in Table I. A low score suggests risk of mismatch between that AWL and the person doing the job.

Table I: Categorisation of scores for the Areas of Worklife Scale[3]

Area of Worklife	Range	Score categories†		
		Low	Moderate	High
Workload	1–5	< 2.33	2.34–3.50	> 3.50
Control		< 2.67	2.67–4.00	> 4.00
Reward		< 2.75	2.76–3.80	> 3.80
Community		< 2.80	2.81–4.00	> 4.00
Fairness		< 2.33	2.34–3.33	> 3.33
Values		< 2.75	2.76–3.75	> 3.75

†Compiled from a normative study of 22 714 individuals from various countries.[3] Moderate scores range from the 25th to the 75th percentile of the normative study.[3] Low scores are less than the 25th percentile. High scores are greater than the 75th percentile.

As in Part 1 of this study, we analysed our questionnaire's scores using a dual approach: firstly, analyses of each of the individual six AWLs, including comparisons with normative scores.[3] Secondly, we performed regression analyses; a multivariate linear regression analysis, through which we sought predictors of each of the three burnout dimensions as well as logistic regression analysis through which we sought predictors of clinically diagnosable burnout (according to the *Emotional Exhaustion+1* principle[5]).

Using two-sided t-tests, we compared our sample's mean scores for each of the six AWLs with those from a normative study of > 22 500 employees, which included 15 260 hospital workers.[3] Within-study group data were not normally distributed. Therefore, we compared groups using the Mann-Whitney U test for unpaired data. We accepted an alpha value < 0.05 as indicating statistical significance. We calculated 95% confidence intervals (95% CI) for differences between medians according to the Hodges-Lehmann method.[10,11] We compared proportional data using the chi-squared test and we calculated 95% CI for proportions according to Wilson's method.[10] Survey scores derived from Likert scales are not intuitively meaningful. In order to add meaning to the differences between groups, we report appropriate measures of effect-size, namely relative risk for differences between proportions and probability of superiority for the Mann-Whitney U and Wilcoxon signed rank tests.[12] (Part 1 Appendix, Tables A1 and A2).[1]

We determined multivariate predictors of the three burnout dimensions‡ using stepwise least-squares multiple linear regression. The six AWLs were the continuous independent

† A state of clinically diagnosable burnout is considered to exist when a person has a high Maslach score for *emotional exhausion* plus either a high score for *cynicism* or a low score for *efficacy*.

‡ *Emotional exhaustion, cynicism and efficacy*

Figure 1: Proportions of respondents with low and high scores for five of the *Areas of Worklife*

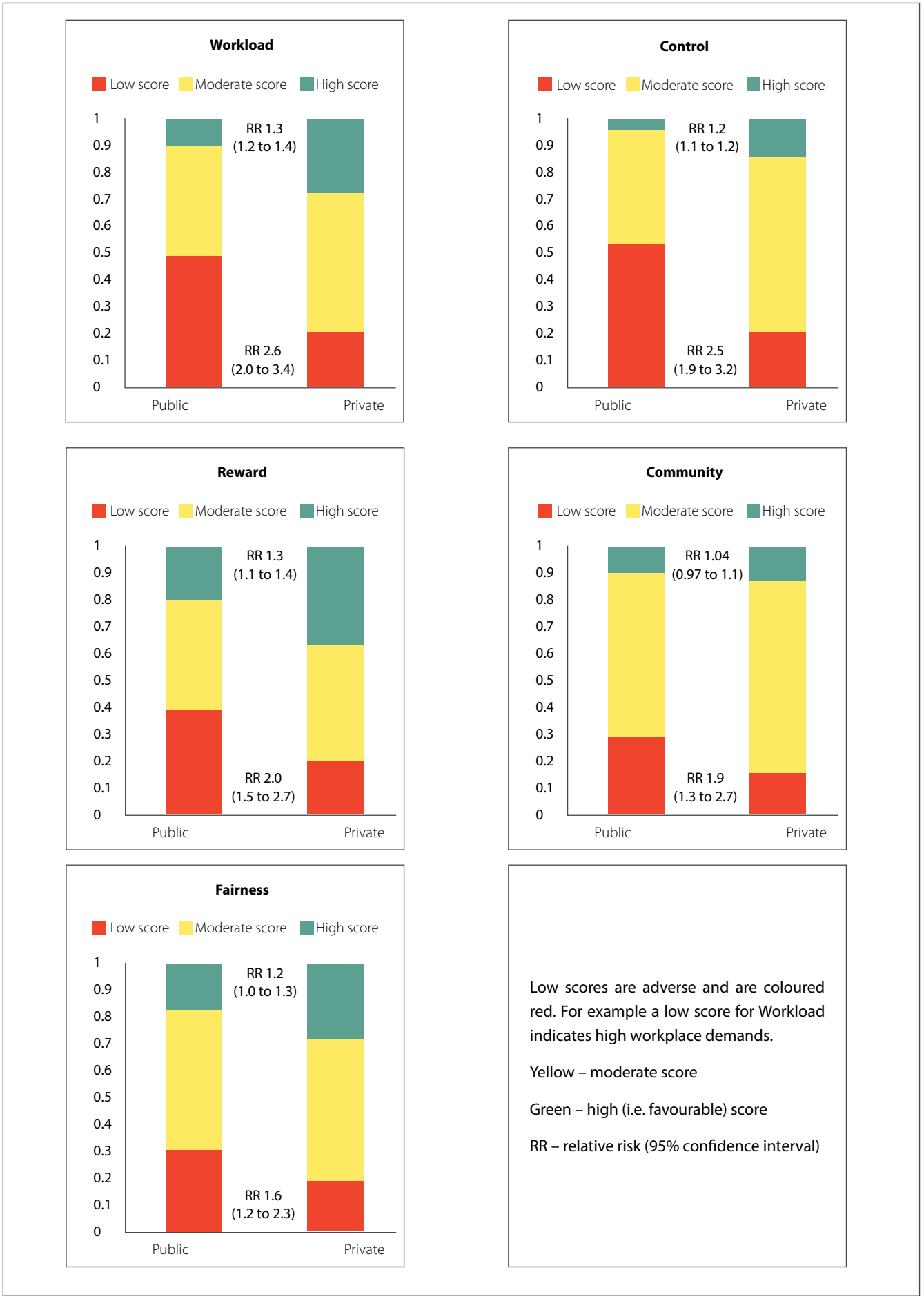

Table II: Overall, areas of work-life comparisons with results from a normative study[3]

Area of work-life		Mean	SD	95% CI difference	*p*	Effect size (Glass's Δ)
Workload	SASA	2.79	0.86	0.10 to 0.24	< 0.0001	0.21 (small)
	Normative	2.96	0.80			
Control	SASA	3.14	0.91	0.09 to 0.23	< 0.0001	0.20 (small)
	Normative	3.31	0.86			
Reward	SASA	3.22	0.90	-0.11 to 0.05	0.457	0.03 (very small)
	Normative	3.19	0.89			
Community	SASA	3.40	0.78	-0.09 to 0.50	0.600	0.02 (very small)
	Normative	3.38	0.84			
Fairness	SASA	2.80	0.73	-0.09 to 0.51	0.580	0.025 (very small)
	Normative	2.78	0.80			

SASA – SASA respondents; Normative – score from the normative study[3]
SD – standard deviation; 95% CI difference – 95% confidence interval of the difference between the mean values
Low scores (< 3) for the various areas of work-life indicate poor congruence between the person and the work environment
Interpretation of Glass's Δ: 0 = no effect; 0.2 = small effect; 0.5 = medium effect; 0.8 = large effect. For the calculation of Glass's Δ, the denominator was the standard deviation of the normative (control) group.

variables. Categorical variables included age-group, gender, sector (private/public), years' experience and professional qualification. A variable entered the model if its associated significance was $p < 0.05$ and exited if $p > 0.1$. We evaluated goodness of fit by the multiple correlation coefficient and the coefficient of determination, (R^2), adjusted for the number of independent variables in the regression model.

We also performed stepwise logistic regression analysis. The dichotomous, dependent variable was clinically diagnosable burnout (according to the "*Emotional Exhaustion*+1 principle"[5]). Independent variables and criteria for entering the model were the same as the aforementioned for the multiple linear regression analysis. We set the outcome's classification cut-off value to 0.5. We evaluated the overall model fit by obtaining the difference between the -2*Ln likelihood values for the null and full models which yields a chi-squared statistic. We calculated the coefficient of determination, (pseudo R^2), according to the method of Nagelkerke.[13] We evaluated the predictive accuracy of the model by constructing a cross-classifying table. We used the model's predicted probabilities to construct a receiver operating characteristic curve with the dependent variable as the classification variable.

Results

We received 498 completed questionnaires which represented a response rate of 26.9% and a margin of error of 3.76%. Cronbach's alpha coefficient for the Area of Worklife Survey (95% lower confidence limit) was 0.90 (0.91). For the individual AWLs, Cronbach's alpha coefficients were 0.79 (0.77), 0.82 (0.79), 0.89 (0.88), 0.83 (0.81) and 0.81 (0.78) for *workload, control, reward, community* and *fairness* respectively. These values exceed the requisite reliability thresholds for research.[8]

The majority of respondents were male (53%), specialists (76%) and were in private practice (74%), of whom 57% were part of a group practice. There were only 8 intensivists (1.6%). Public sector respondents worked predominantly (84%) in academic/tertiary hospitals.

Table II summarises comparisons of the six AWLs with normative values.

Overall, mean scores returned by the 498 respondents for both *workload* and *control* were significantly lower (i.e. more adverse) than normative values (with small effect-sizes). There were no significant differences regarding *reward, community* and *fairness* (with small effect-sizes). Regarding the portion of the questionnaire pertaining to the *values* AWL, only 40 in the public sector and 36 in the private sector responded as intended. This was the result of unclear wording in the questionnaire with regard to distinguishing between the organisations within which respondents functioned. Thus, we were unable to evaluate the *values* AWL appropriately.

Table III and Figure 1 summarise comparisons between the public and private sectors. Public-sector anaesthetists median scores for five AWLs (excluding *values)* were significantly smaller (i.e. more adverse) than those of private practitioners. The effect-sizes for the differences were large for *workload* and *control*, medium for *reward* and small for *community* and *fairness*. With regard to the *values* AWL, the 40 public sector employees as well as the 36 private sector anaesthetists who answered that portion of the questionnaire as intended, revealed greater mismatch between themselves and the hospital administrations for whom they worked, than between themselves and the departments/practices within which they functioned (with large effect-sizes).

With regard to high, moderate, and low score categories, greater proportions of public sector anaesthetists returned low (i.e. adverse) scores for five AWLs (*values* excluded). Associated relative risks were high (Figure 1). Accordingly, smaller proportions of public sector anaesthetists had high scores for *workload, reward, control* and *fairness*, also with high associated relative risks. We did not detect a significant difference between the proportions of public and private sector anaesthetists who had high scores for *fairness.*

Table IV summarises the results of the multivariable least squares regression analysis. Explanatory variables for *emotional*

Table III: Comparisons of the areas of work-life scores between SASA members working in the public (n = 189) and the private sectors (n = 309)

Area of work-life	Sector	Median score	Score category	IQ range	Range	95% CI diff	*p*	Effect size†
Workload	Pub	2.2	L	1.8–2.9	1–4.8	0.6 to 0.8	< 0.0001	0.73 (large)
	Priv	3.2	M	2.6–3.6	1–5			
Control	Pub	2.5	L	2.5–2.8	1–4.5	0.5 to 1	< 0.0001	0.73 (large)
	Priv	3.5	M	3.5–3.8	1.25–5			
Reward	Pub	3	M	2.3–3.8	1–5	0.3 to 0.8	< 0.0001	0.66 (medium)
	Priv	3.5	M	3.0–3.4	1–5			
Community	Pub	3.4	M	2.6–4.0	1–4.8	0.0 to 0.4	0.002	0.58 (small)
	Priv	3.6	M	3.0–4.0	1.2–5			
Fairness	Pub	2.7	M	2.1–3.0	1–4.5	0.2 to 0.5	< 0.0001	0.62 (small)
	Priv	2.8	M	2.5–3.5	1.2–5			
Values‡ (n = 40)	Pub (Dept)	4.0	H	3.5–4.0	2–5	0.9 to 1.4	< 0.0001	0.90 (large)
	Pub (Hosp)	2.5	L	2.3–3.0	1–5			
Values‡ (n = 36)	Priv (Prac)	4.3	H	3.8–4.6	2.8–5.0	1.0 to 1.5	< 0.0001	0.97 (large)
	Priv (Hosp)	3.0	M	2.5–3.1	1.8–4.3			

Pub – Public sector; Priv – Private practice sector
Scores were categorised according to Table I. Low scores indicate poor congruence with the work environment, e.g. a low score for *workload* implies a high workload job demand.
Codes for score categories: H, M, L – high, moderate and low scores respectively
IQ range – interquartile range
95% CI diff – 95% confidence interval of the difference between medians
P – p value generated by Mann-Whitney U test
† Probability of superiority. Interpretation: 0.5 = no effect; 0.56 = small effect; 0.64 = medium effect; 0.71 = large effect; 0.8 = very large effect
‡ Wilcoxon signed rank test

Table IV: Results of the stepwise least squares multiple linear regression analysis

Burnout dimension	Independent variables	Coefficient	Standard error	*P*†	$r_{partial}$
Emotional exhaustion (Adjusted R^2 = 0.501)	Constant	60.33	0.57		
	Workload	-6.66	0.56	< 0.0001	-0.50
	Reward	-2.66	0.56	< 0.0001	-0.21
	Community	-2.10	0.55	0.0003	-0.16
	Control	-1.58	0.52	0.0053	-0.12
Cynicism (Adjusted R^2 = 0.252)	Constant	22.62			
	Workload	-1.71	0.31	< 0.0001	-0.24
	Reward	-1.34	0.31	< 0.0001	-0.19
	Gender	-1.04	0.48	0.0325	-0.10
	Control	-0.84	0.33	0.0110	-0.11
	Experience	-0.62	0.24	0.0086	-0.12
Efficacy (Adjusted R^2 = 0.228)	Constant	17.64			
	Reward	2.02	0.42	< 0.0001	0.21
	Community	1.43	0.44	0.0013	0.14
	Control	1.31	0.41	0.0014	0.14
	Experience	0.81	0.30	0.0069	0.12

Adjusted R^2 – the coefficient of determination adjusted for the number of independent variables in the regression model
$r_{partial}$ – the correlation of the variable with the dependent variable, adjusted for the effect of the other variables in the model
† *P*-value for the Wald chi-squared statistic

exhaustion included *workload, reward, community* and *control*. For *cynicism* they were *workload, reward, control, gender* and *years of experience*. Regarding these two burnout dimensions (*emotional exhaustion and cynicism*), *workload* and *reward* were the strongest predictors. Predictors for *efficacy* included *reward, community, control* and *experience* with *reward* being the strongest predictor.

Note: Low scores for AWLs indicate adverse work settings, hence the negative coefficients regarding *emotional exhaustion* and *cynicism* with AWL; conversely positive coefficients for *efficacy* with AWL.

Table V summarises the results of the logistic regression analysis. Logistic regression identified three *AWLs* that contributed significantly to the model, namely *workload, reward* and *community*. *Workload* was the strongest predictor, such that *reward* and *community* made only minor contributions to the final model. This is demonstrated by the small differences in goodness of fit when *workload* was the only explanatory variable

Table V: Parameters of two logistic regression models for a diagnosis of burnout according to the "*Emotional Exhaustion*+1" principle

Full model			
Explanatory variable	**Coefficient**	***P* value†**	**Odds ratio (95% CI)**
Constant	6.290	< 0.0001	
Workload	-1.689	< 0.0001	0.185 (0.121 to 0.281)
Reward	-0.590	0.0003	0.555 (0.402 to 0.765)
Community	-0.481	0.0098	0.618 (0.429 to 0.891)
Reduced model			
Explanatory variable	**Coefficient**	***P* value†**	**Odds ratio (95% CI)**
Constant	3.501	< 0.0001	
Workload	-1.906	< 0.0001	0.149 (0.100 to 0.222)

The full model comprised *workload, reward* and *community* areas of work-life scores as explanatory variables. In the reduced model, only *workload* scores were included as the explanatory variable
†*P*-value for the Wald chi-squared test statistic
95% CI – 95% confidence interval

(Table V and Table A1 in the Appendix). Both models classified > 80% of cases correctly.

Discussion

Whereas congruence between the worker and the six AWLs promote work engagement, mismatches in a few crucial areas can result in distress and the risk of burnout.[2] The ideal working environment should involve manageable workloads, where employees are treated fairly and respectfully (*fairness, reward and values* AWLs) and where they are permitted to make meaningful decisions about their work (*control, values*). People should be recognised for their efforts by the organisation and by their colleagues (*reward, community*) and they should feel comfortable about their job and with their co-workers (*community, values*). Figure 2 portrays a model of the complex interrelations between the six AWLs and the three burnout dimensions.[4,14]

The central and right-hand sections of Figure 2 depict how the three dimensions of the Maslach burnout model influence the outcome of a person's psychological relationship with his/her work. This outcome can be regarded as taking place somewhere on a continuous scale, one extreme being burned out (emotionally exhausted, detached and ineffective) and the other being engagement (a state of high energy, strong involvement and effectiveness).[15] The central section of Figure 2 also illustrates how energy depletion (i.e. *emotional exhaustion*) progresses to decreased involvement (*cynicism or depersonalisation*), which is an initial defence mechanism, and subsequently to feelings of futility (decreased *efficacy* or *personal accomplishment*). The left-hand section of the AWLs model depicts the important role played by *workload. Workload* impacts directly on the energy dimension of burnout, which in turn influences involvement and efficacy. *Control,* by enabling choices that impact important work-life decisions, is central to the model. The pivotal role of these two AWLs are supported by the demand-control job-stress theory,[16] whereby distress results from excessive workloads together with inability to participate in decision making. The AWLs model expands the demand-control job-stress theory, whereby *values* plays an integrative role, by mediating all three burnout dimensions. *Values* in turn are influenced by *rewards, community* and *fairness*. Thus, workers' values are likely to be congruent with those of the organisation if they feel that the organisation enables them to participate in work-related decisions, that they are treated fairly and equitably

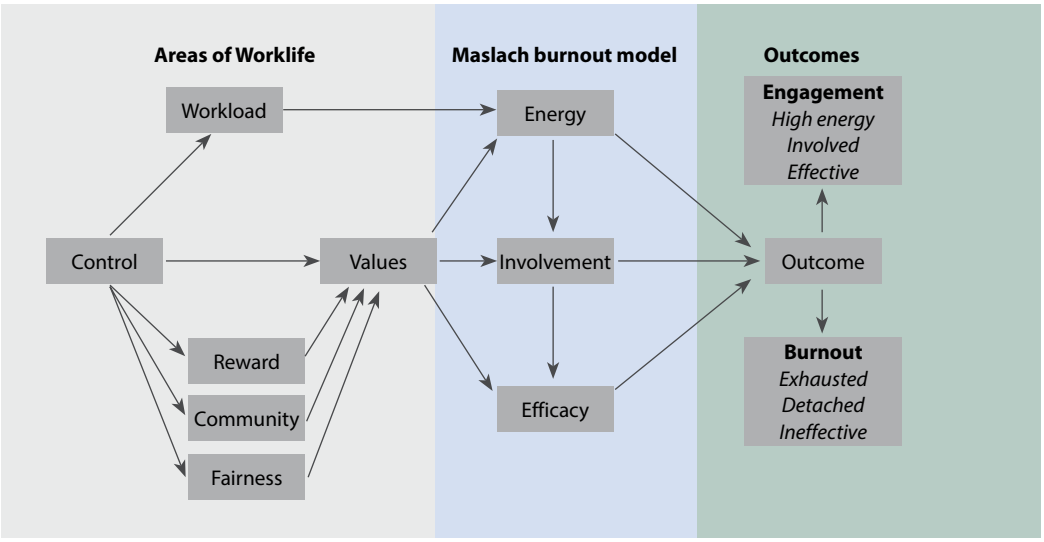

Figure 2: The interrelations between the AWLs and the three burnout dimensions
Adapted from Gascon et al.[14]

by the organisation and by colleagues who are supportive and appreciative of their efforts. A deficiency of any one of these AWLs is likely to result in a conflict with personal values, increasing the risk of burnout.[4,14]

Our regression models highlight the dominant role of an excessive *workload* among our respondents. The central position of *control* is confirmed, being associated with all three burnout dimensions. The mediating roles of *reward* and *community* also feature in the models. The non-inclusion of *fairness* into the regression models indicates perhaps that generally, anaesthetists perceive that they are treated without favouritism. It is a weakness that we could not incorporate the *values* AWL into our analysis; however, there appears to be a group of anaesthetists (notably in the public sector) who experience conflict between their core values and the value systems of their employers.

Work overload and lack of control over professional life appear to be the main driving forces towards burnout with inputs from the *reward* and *community* AWLs. The coefficient of determination for the full logistic regression model was 0.448 signifying that 44.8% of the variability could be explained by the model. Other socio-demographic characteristics also contribute to the risk of burnout. We found a greater prevalence among younger participants with less than 15 years' experience. Personality type, which we did not evaluate, also contributes to the development of the syndrome. The "Big Five" model of personality traits comprise neuroticism, extroversion, openness to experience, conscientiousness and agreeableness.[17] In a study regarding personality traits and burnout among 655 Dutch anaesthetists, Van der Wal and colleagues[18] concluded that neuroticism was the most important predictor of burnout, while extroversion and openness were protective.

The overall purpose of this study was to determine the prevalence and degree of burnout and to broadly identify possible causative factors. We cannot speculate about solutions to the problem, other than to draw attention to systematic reviews[15,19-22] that conclude that changes within organisations are more effective than individual approaches, such as improving resilience, Balint groups, mindfulness exercises, etc. Considering that previous studies among state-employed South African doctors have also demonstrated disturbing levels of burnout,[23-26] it is imperative that our various professional societies and associations confront the national and provincial departments of health with the purpose of addressing the root causes of physician burnout. Doctors working within an authoritarian system, being subjected to unreasonable workloads and demands that conflict with their personal core values, who are emotionally exhausted, detached, cynical and who perceive themselves as ineffective, are not likely to deliver efficient, patient-orientated healthcare. The words of Dinesh Bhugra‡ ring true: *"A system that fails to support and protect the health of its own workforce will only flounder, and this is as clear a call to action if ever there was one."*[27]

Acknowledgements

Mr Dawid van Straaten for transcribing the questionnaires to the REDCap system and for his persistence in spite of an erratic email server.

Professor Andrew Levin for his helpful improvements to the manuscript text.

Conflict of interest

The authors declare no conflict of interest.

Funding source

The SASA Jan Pretorius Research Fund funded licences for the questionnaires.

Ethics approval

The Stellenbosch University Research Ethics Committee, Humanities, granted approval to conduct this anonymised, prospective, analytic, cross-sectional study (Project No.6254)

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Appendix

Definitions of the six areas of work-life (verbatim quote from Leiter and Maslach)[3]

Workload

"The most obvious, and most commonly discussed, source of burnout is a heavy workload, when job demands exceed human limits. People have to do too much in too little time with too few resources. Increasing workload has a consistent relationship with burnout, especially with the exhaustion dimension."

Control

"This area includes employees' perceived capacity to influence decisions that affect their work, to exercise professional autonomy, and to gain access to the resources necessary to do an effective job."

Reward

"The reward area of worklife addresses the extent to which rewards — monetary, social, and intrinsic — are consistent with expectations. Lack of recognition from service recipients, colleagues, managers, and external stakeholders devalues both the work and the workers and is closely associated with feelings of inefficacy."

Community

"Community is the overall quality of social interaction at work, including issues of conflict, mutual support, closeness, and the capacity to work as a team."

Fairness

"Fairness is the extent to which decisions at work are perceived as being fair and people are treated with respect."

Values

"The values area is at the heart of people's relationship with their work. It encompasses the ideals and motivations that originally attracted them to the job.[…] However, when there is a values conflict on the job, it can undermine people's engagement with work. The greater the gap between individual and organisational values, the more often staff members find themselves making a trade-off between work they want to do and work they have to do."

Table A1: Evaluation of the goodness of fit of two logistic regression models for a diagnosis of burnout according to the "Emotional Exhaustion + 1" principle[5]

Statistic	Explanatory variables	
	Full model	***Workload* only**
Chi-squared; p-value	173.5; $p < 0.0001$	137.8; $p < 0.0001$
Pseudo R^2	0.448	0.368
C-statistic	0.87 (0.84 to 0.90)	0.84 (0.81 to 0.87)
Proportions of cases correctly classified		
	Full model	***Workload* only**
Total sample (n = 498)	83.7% (80.2 to 86.7)	80.9% (77.2% to 84.1%)
Not clinically burned out	93.3% (90.3% to 95.4%)	90.9% (87.6% to 93.4%)
Clinically burned out	51.3% (42.2% to 60.3%)	49.9% (38.0% to 56.1%)

Proportions are % (95% confidence interval)
The full model comprised the *workload, reward* and *community* areas of work-life scores as explanatory variables. In the *workload* only model, only workload scores were included as the explanatory variable.
Pseudo R^2: Nagelkerke coefficient of determination[13]
C-statistic – area under the receiver operating characteristic curve