'Very demanding. Extremely rewarding': Exploring the co-occurrence of burnout and engagement in alcohol and other drug workers

NATALIE SKINNER[1] & ANN M. ROCHE[1]

[1]*National Centre for Education and Training on Addiction, Flinders University, Adelaide, Australia*

Abstract

Introduction. *Alcohol and other drug (AOD) work can be highly meaningful and satisfying, but also intense and highly demanding. This combination often creates significant strain for workers. Mirroring this complexity, this study considered the predictors and outcomes of the concurrent experience of burnout and engagement in AOD workers. The Job Demands-Resources model informed the study.* **Methods.** *This study utilised data from a recent Australian AOD workforce survey. The sample comprised 886 workers in direct client service roles. K-means cluster analysis on burnout and engagement measures identified four discrete groups: burnt out (15.6%) (high burnout/low engagement), engaged (36.7%) (low burnout/high engagement), overextended (26.5%) (high burnout/high engagement) and indifferent (21.2%) (low burnout/low engagement).* **Results.** *Multinomial logistic regression analysis indicated that workers were more likely to be burnt out or overextended, rather than engaged, if they reported high work intensity, low organisational openness to change and low support. Multivariate analysis of variance showed burnt-out workers had the least favourable and engaged respondents the most favourable outcomes on job satisfaction, turnover intention, health and life quality. Overextended workers were comparable to indifferent workers on these outcomes.* **Discussion and Conclusion.** *This study offers a unique and nuanced view of AOD worker wellbeing. For the one-quarter of workers reporting simultaneous burnout and engagement, their enthusiasm and commitment did not protect them from poor personal and organisational outcomes typically linked with burnout. The need for systemic and structural interventions is clearly indicated, including open and supportive organisational cultures, leadership development and adequate staffing.* [Skinner N, Roche AM. 'Very demanding. Extremely rewarding': Exploring the co-occurrence of burnout and engagement in alcohol and other drug workers. *Drug Alcohol Rev* 2021]

Introduction

The role of the alcohol and other drugs (AOD) worker is crucial. However, AOD work can be both very meaningful and highly stressful [1]. An apparent anomaly exists where workers can, and do, report high levels of burnout [2], while also maintaining high levels of dedication and commitment. This phenomenon has been little explored. A better understanding of predictors and outcomes of the concurrent existence of burnout and engagement will inform strategies to support AOD worker wellbeing.

Burnout is a form of chronic stress characterised by psychological, emotional and physical exhaustion and negative work perceptions such as cynicism [3]. It results from a complex interplay between organisational and individual factors [4] and is a significant risk for health and human service professionals [5,6]. Approximately one-third of AOD workers in European treatment services reported burnout [2]. In contrast, engagement is a positive motivational state of high energy and enthusiasm [7]. The one AOD study to-date observed that 70% of Australian non-governmental organisation workers reported high engagement [8].

Very recently, burnout and engagement have been examined as states that may be experienced concurrently [9]. This simultaneous experience of burnout and engagement has been posited as more likely in complex situations in which both aversive demands and attractive rewards are present, hence, activating both approach (engagement) and withdrawal (burnout) responses [10,11].

Studies of teachers [12] and nurses [13] have found concurrent burnout and engagement levels similar to

Natalie Skinner PhD, Senior Research Fellow, Ann M. Roche PhD, Director. Correspondence to: Dr Natalie Skinner, National Centre for Education and Training on Addiction, Flinders University, GPO Box 2100, Adelaide, SA 5001, Australia. E-mail: natalie.skinner@flinders.edu.au

those demonstrating a singular state of burnout (with low engagement). Both groups reported high demands, low social support and poor health. Whether AOD workers have a similar experience is not known. The current study therefore addressed this knowledge gap and examined the antecedents and outcomes of concurrent and singular states of burnout and engagement in AOD workers.

The Job Demands-Resources (JD-R) model of burnout and engagement [3] informed the study. The JD-R model provides a framework that can be adapted to particular work contexts [14], and has strong empirical support [14–16]. Job demands are physical, social or organisational factors that require effort and incur energetic costs such as fatigue [3]. Job resources facilitate positive outcomes, such as attaining goals or reducing demands [3]. In the JD-R model, demands increase psychological strain (e.g. burnout). Strain, in turn, increases negative outcomes (e.g. turnover) and reduces positive outcomes (e.g. job satisfaction) [14]. Job resources increase wellbeing (e.g. engagement) and decrease strain (e.g. burnout). Wellbeing, in turn, increases positive outcomes (e.g. job satisfaction) [14].

Predictors of burnout and engagement

Job demands. Evidence demonstrates links between burnout and (i) long hours in AOD [1] and other workers [17]; and (ii) work intensity in AOD/mental health workers [5,18]. Job insecurity, a demand linked to burnout [14], has received less attention in relation to AOD workers.

Job resources. Previous research [16,19] shows AOD workers' engagement increases with higher resources, including social support. Social support has been linked with a reduction in occurrence or severity of burnout occurring in AOD workers [1,20,21], whereas poor support has been associated with an increased likelihood of burnout [5]. Access to clinical supervision has been emphasised as a key protective factor against burnout in studies of AOD [20,21] and mental health workers [5,22]. Similarly, meta-analyses have found engagement to increase with access to skill development opportunities such as feedback and professional development [16]. Research also highlights the role played by an organisational culture open to change and innovation in facilitating higher engagement and lower burnout [23,24].

Outcomes of burnout and engagement

Burnout results from cycles of energy depletion from chronic overload of demands [14]. Well established outcomes of burnout include actual and intended turnover [20,25,26], low job satisfaction [2,25] and poor physical health [19,25]. Burnout is also linked to lower quality health care [6] and lower client engagement in AOD treatment [27]. Consistent with the conceptualisation of engagement as a positive motivational process, engagement has been linked with lower turnover intentions [19], higher job satisfaction [25] and good health [19].

The current study

We explored four states of burnout and engagement: burnt out (high burnout/low engagement), engaged (low burnout/high engagement), overextended (high burnout/high engagement) and indifferent (low burnout/low engagement). Three outcomes were considered: job satisfaction, turnover intention and health.

High demands (high work intensity, long work hours, job insecurity) were expected to predict the state of burnout (high burnout/low engagement) and overextension (high burnout/high engagement). High resources (high support, access to clinical supervision, organisational openness to change) were expected to predict the state of overextension (high burnout/high engagement). Low demands and low resources were expected to predict indifference (low burnout/low engagement). Engaged workers (high engagement/low burnout) were used as the reference group in the analysis (e.g. workers were expected to be burnt out, rather than engaged, if they reported high demands; workers were expected to be indifferent, rather than engaged, if they reported low resources). Recent JD-R research has highlighted the importance of personal resources such as resilience and work-related efficacy [14]. Personal resources often develop with general life experience (i.e. age) and work experience. Younger health workers have been observed to be at higher risk of burnout [17], whereas older AOD workers are more likely to be engaged [8]. Therefore, we expected that younger age and less AOD experience would predict burnout and overextension.

We expected the least favourable outcomes to be demonstrated by burnt-out workers (i.e. they would report low job satisfaction, high turnover intention, poor health) and most favourable outcomes by engaged workers (i.e. they would report high job satisfaction, low turnover intention, good health). Overextended workers were expected to demonstrate poorer outcomes, equivalent to burnt-out respondents.

The indifferent group was expected to demonstrate poorer outcomes compared to the engaged group.

Methods

Survey method

This study utilised data from a recent national Australian AOD workforce survey [28]. Respondents comprised workers from the government, non-governmental organisations and private sectors. Ethics approval was obtained from Flinders University Social and Behavioural Research Ethics Committee, Southern Adelaide Clinical Human Research Ethics Committee (under the National Mutual Acceptance Scheme) and jurisdictional research ethics and governance bodies.

Measures

Unless otherwise specified, a five-point response scale was used (1 = strongly disagree, 5 = strongly agree). Table 3 shows internal consistency (Cronbach's α) for the multi-item scales.

Personal and employment demographics. Gender was reported on a six-option scale: male, female, trans man, trans female, non-binary, different gender identity. Age was reported in years. Years of experience in AOD work was reported on a four-point scale (<12 months; 1–3 years; 4–9 years; 10+ years).

Burnout and engagement. Burnout was assessed by the work-related burnout scale of the Copenhagen Burnout Inventory [29] comprising three items addressing burnout frequency (e.g. 'How often do you feel worn out at the end of the working day') (1 = never almost never, 5 = always) and three items addressing burnout intensity (e.g. 'To what degree is your work emotionally exhausting?') (1 = to a very low degree, 5 = to a very high degree). Engagement was assessed by the three item Utrecht Work Engagement Scale (e.g. 'I am immersed in my work') (1 = never/almost never, 5 = always) [7].

Job demands. Overtime was assessed with a single item addressing frequency of extra hours or overtime beyond contracted hours (1 = almost never/never, 5 = every day/most days). Work intensity was measured by the five item effort subscale of the Effort-Reward Imbalance scale (e.g. 'I have constant time pressure due to a heavy workload') [30]. Job insecurity was assessed by a four item scale (e.g. 'I feel insecure about the future of my job') [31].

Job resources. A single item assessed access to clinical supervision (yes/no). Organisational openness to change was assessed by the Change Climate subscale of the Organisational Readiness for Change scale (e.g. 'It is easy to change procedures to meet new conditions') [32]. Support was measured by the five item esteem subscale of the Effort-Reward Imbalance Scale (e.g. 'I experience adequate support in difficult situations') [30].

Satisfaction and turnover. Job satisfaction was assessed using Taylor and Bower's [33] single item measure of global job satisfaction ('How satisfied are you with your job?') (1 = completely unsatisfied, 5 = completely satisfied). Turnover intention was assessed by a three item measure (e.g. 'I frequently think about leaving my current job') [34].

Health and quality of life. Health was assessed using the short form-36 (SF-36) global measure of health [35] 'In general, would you say your health is?' (1 = poor, 5 = excellent). Quality of life was measured with the World Health Organization Quality of Life [36] single item measure 'How would you rate your quality of life?' (1 = very poor, 5 = very good).

Statistical analyses

All analyses were conducted in IBM SPSS Statistics Version 25.

Cluster analysis: burnout and engagement profiles. K-means cluster analysis was used to investigate whether respondents could be classified into discrete groups based on burnout and engagement scores. Cluster analysis seeks to 'identify a "natural" structure among the observations based on a multivariate profile' [37, p. 415]. The number of clusters was set at four, an analysis approach considered acceptable when informed by pre-existing theory [37]. K-means cluster analysis applies an iterative approach in which initial cluster centres are identified based on the cases with the greatest Euclidean distance apart on the clustering variables (burnout and engagement scores). Further refinements to cluster centres and cluster membership are conducted on an iterative basis until there are no further changes [37].

Data were screened for univariate and multivariate outliers and multicollinearity before analysis.

Standardised (*Z*) scores were used. As a preliminary validation process, an initial cluster analysis was conducted on a random split of the sample. Both samples produced four clusters with comparable interpretations. The final cluster centres produced by the whole sample analysis are shown in Table 1. Final centres indicate the properties of the typical case within each cluster. Around half of respondents (52.3%) demonstrated singular states of either engagement (36.7% high engagement/low burnout) or burnout (15.6% high burnout/low engagement). One-fifth of participants (21.2%) were indifferent (neither engaged nor burnt out) and around one-quarter (26.5%) were over-extended (concurrently engaged and burned out). The clusters showed good homogeneity with the average Euclidian distance between cases within each cluster less than 1.0 (*M* = 0.70).

Table 2 shows the Euclidian distances between the final cluster centres, with greater distances indicating a higher level of differentiation between the groups. The engaged and burnt-out groups showed the greatest differentiation, followed by the indifferent and burnt-out groups. The indifferent and overextended groups showed less, but acceptable, differentiation.

Results

Sample and descriptive statistics

The sample comprised 886 workers in direct client service roles such as counselling (25.2%), intake assessment (14.6%) and case management (10.6%). Most respondents were women (69%), aged 36–64 years (70.9%), based in metropolitan locations (60.9%) in the non-government organisation sector (57.9%). Around half (51.4%) reported seven or more years' AOD work experience. While accurate demographic data on the Australian AOD workforce is not available, this profile is consistent with previous surveys [8,38].

Respondents reported moderate levels of burnout, overtime frequency, work intensity, organisational openness to change and health, and relatively high levels of engagement, support, job satisfaction and quality of life (Table 3). Turnover intentions and job insecurity were relatively low. Burnout and engagement scores were moderately and negatively correlated. As expected, burnout was negatively correlated with job resources, health and life quality and positively correlated with job demands and turnover intentions. Engagement was negatively correlated with job demands and turnover intentions, and positively correlated with job resources, job satisfaction, health and life quality.

Predictors of burnout and engagement

A multinomial logistic regression (*n* = 745) was conducted to model the relationship between group membership (Table 4) and age, AOD experience, job resources and job demands. Backwards stepwise selection method was used (*P* < 0.05) with listwise deletion of missing cases. The reference group was engaged respondents. Odds ratios greater than 1.0 indicated an increased likelihood, and less than 1.0 a decreased likelihood, of classification into a target group (e.g. burnt out) rather than the reference group (engaged). Measures of job demands and resources were transformed into binary (high/low) variables by median split. Age was entered as a covariate (continuous variable).

AOD sector experience, access to clinical supervision and job insecurity were non-significant predictors removed on the first step. The remaining predictors were statistically significant (*P* < 0.001; *P* < 0.05 for overtime frequency). The final model demonstrated an acceptable fit Model $\chi^2(15)$ = 182.90, *P* < 0.001, Pearson $\chi^2(675)$ = 683.75, *P* = 0.399, Deviance $\chi^2(675)$ = 681.46, *P* = 0.423, Pseudo R^2 = 0.22 (Cox and Snell), 0.23 (Nagelkerke), 0.09 (McFadden). As Table 4 shows, respondents were more likely to be burnt out (than engaged) if they were younger, had high work intensity, experienced low organisational openness to change and low support. Respondents were more likely to be overextended (than engaged) if

Table 1. *Final cluster centres (Z scores), whole sample n and % for groups identified by the cluster analysis*

Group	N	%	Burnout		Engagement	
			M	SD	M	SD
Burnt out	138	15.6	1.26	0.77	−1.41	0.58
Engaged	325	36.7	−0.79	0.58	0.88	0.54
Overextended	235	26.5	0.74	0.50	0.12	0.52
Indifferent	188	21.2	−0.48	0.46	−0.50	0.55

Table 2. *Distances between final cluster centres (Euclidian distance)*

Cluster	Burnt-out	Engaged	Overextended	Indifferent
Burnt-out	—	3.07	1.62	1.97
Engaged	—	—	1.70	1.42
Overextended	—	—	—	1.37

they were younger, reported high work intensity and low support. Respondents were more likely to be indifferent (than engaged) if they did not work overtime and reported low support.

Outcomes of burnout and engagement

A one-way multivariate analysis of variance (n = 877) was conducted to examine group differences on job satisfaction, turnover intention, health and quality of life. Data were screened prior to analysis to check for normality, equality of variance, outliers (univariate, multivariate) and multicollinearity.

The multivariate analysis of variance effect was statistically significant, Pillais' Trace = 0.36, F(12,2616) = 26.34, $P < 0.001$, $\eta^2 = 0.12$; Wilk's Lambda = 0.65, F(12,2302) = 33.66, $P < 0.001$), $\eta^2 = 0.13$. A series of one-way analysis of variance examined group differences. Table 5 shows group means. There were significant group differences on job satisfaction (F(3873) = 87.36, $P < 0.001$, partial $\eta^2 = 0.23$) and turnover intention (F(3873) = 74.52, $P < 0.001$, partial $\eta^2 = 0.20$). Bonferroni post-hoc tests ($P \leq 0.001$) indicated that compared to all other groups (i) burnt-out respondents had the lowest job satisfaction and highest turnover intention; and (ii) engaged respondents had the highest job satisfaction and lowest turnover intention. There were no significant differences between indifferent and overextended respondents.

Self-reported health differed between the groups (F(3873) = 24.32), $P < 0.001$, partial $\eta^2 = 0.08$). Engaged respondents reported better health than burnt out ($P < 0.001$), over-extended ($P < 0.001$) and indifferent ($P < 0.01$) respondents. Burnt-out respondents reported lower health than indifferent ($P < 0.01$) respondents. No significant differences on health were observed between overextended respondents and both burnt-out and indifferent respondents.

There were significant group differences on self-reported quality of life (F(3873) = 53.30, $P < 0.001$, partial $\eta^2 = 0.16$). Compared to all other groups, engaged respondents reported the highest, and burnt-out respondents the lowest, life quality. Contrasts were significant at $P \leq 0.001$ with the exception of engaged compared to indifferent respondents ($P < 0.05$).

Discussion

This study examined AOD workers' experience of burnout and engagement and in particular their concurrent manifestation. As one of few studies of this type to be undertaken it offers a unique perspective on AOD workers' wellbeing. Approximately a quarter (26.5%) of workers exhibited the complex multi-dimensional states of concurrent burnout and engagement, while around half displayed singular states of either burnout (15.6%) or engagement (36.7%). Around one-fifth (21.2%) were relatively indifferent (low on both states).

Consistent with the JD-R model of burnout [3], burnt-out respondents reported the least favourable and engaged respondents the most favourable outcomes in relation to job satisfaction, turnover intention, health and quality of life. Our findings on the overextended workers highlight the potential risks of simultaneous exhaustion and motivation. Overextended workers were comparable to indifferent workers on job satisfaction, turnover intention, health and quality of life. They reported equivalent poor health to burnt-out workers. This pattern suggests the benefits of high engagement were effectively neutralised by overextended workers' high burnout levels. Previous analyses of overextended workers [12,13] have observed a similar pattern of poor outcomes for overextended workers that were similar to their burnt-out colleagues.

Our observation of 42.1% of AOD workers with high burnout (burnt-out and overextended workers) was higher than European and UK estimates [2]. Whether this reflects differences in the epidemiology of burnout in Australia compared to other countries, or differences in measurement and operational definitions of burnout between studies, is unclear. Nevertheless, a substantial cohort of AOD workers experienced high levels of burnout, potentially jeopardising their health and professional capacity to deliver high-quality services and support client engagement [6,27]. The majority (63.2%) of workers in this study also had high

Table 3. Means, standard deviations, internal consistency (Cronbach's α) and zero-order correlations

	M	SD	α	1	2	3	4	5	6	7	8	9	11	13	14
1 Age	45.32	12.09	—	—											
2 Burnout	2.75	0.73	0.87	-0.08*	—										
3 Engagement	3.71	0.60	0.74	0.07*	-0.49**	—									
4 Overtime	2.88	1.39	—	-0.06	0.21**	-0.03	—								
5 Work intensity	3.39	0.79	0.80	0.09**	0.50**	-0.12**	-0.45**	—							
6 Job insecurity	2.16	0.88	0.88	0.04	0.23**	-0.28**	0.03	0.12**	—						
7 Org open change	3.29	0.75	0.82	-0.09**	-0.28**	0.34**	-0.03	-0.15**	-0.23**	—					
8 Support	3.81	0.75	0.84	-0.10**	-0.36**	0.37**	-0.09**	-0.24**	-0.40**	0.52**	—				
9 Job satisfaction	3.88	0.77	—	-0.03	-0.41**	0.50**	-0.02	-0.19**	-0.28**	0.42**	0.53**	—			
11 Job turnover	2.54	1.19	0.87	0.00	0.39**	-0.44**	0.05	0.21**	0.34**	-0.36**	-0.45**	-0.59**	—		
13 Health	3.27	0.91	—	0.07*	-0.28**	0.22**	-0.09**	-0.10**	-0.17**	0.11**	0.20**	0.18**	-0.13**	—	
14 Quality of life	4.02	0.76	—	-0.08*	-0.40**	0.29**	-0.12**	-0.22**	-0.23**	0.17**	0.32**	0.29**	-0.24**	0.58**	—

Note. All measures re-scaled to 1–5 scale, with the exception of age.

levels of engagement (36.7% engaged and 26.5% over-extended workers), comparable to previous estimates [8].

Predicting burnout and engagement

Work intensity plays a central role in exacerbating burnout [5,18] and in this study it differentiated burnt-out from engaged respondents. While high (but manageable) workloads can be motivating and challenging [39], high work intensity also predicted over-extended (engaged and exhausted) rather than engaged workers. Contrary to expectations, overtime predicted indifference, but not burnout. Indifferent respondents were less likely to contribute extra hours, consistent with their job disengagement. It is worth noting that only 7.5% of respondents reported financial compensation for extra hours, with just over half (56.1%) reporting time-related compensation. The lack of compensation for extra hours may account for the observed relationship with indifference. Nor did job insecurity predict burnout, which may reflect the low levels of insecurity reported by workers in this study. Consistent with previous research regarding the key role of social support in preventing burnout [1,20,21] and facilitating engagement [8,16,19], low support predicted workers who were burnt out, over-extended or indifferent rather than engaged. Consistent with previous studies of health professionals [23,24], we observed that AOD workers were more likely to be burnt out than engaged where their workplace culture was not open to change and innovation.

Younger age as a burnout risk factor is well established [17,40]. Similarly, we found that age, rather than AOD experience, predicted burnout. This finding highlights that younger workers, rather than less experienced workers, may require additional supports. Contrary to previous qualitative research with AOD workers [20,21], clinical supervision was not a significant predictor of burnout or engagement. This may reflect the measure of perceived support used that made the clinical supervision variable redundant. A more precise assessment of clinical supervision quality may produce a different result.

The more nuanced view of worker wellbeing presented here has important implications for strategies to support AOD workers. Highly motivated yet exhausted employees may struggle to sustain their commitment and dedication over the longer term in the face of ongoing demands, and risk transitioning to being simply burnt out [14]. It is crucial that managers, leaders and clinical supervisors understand that an enthusiastic but exhausted worker is a professional at risk.

Table 4. *Multinomial logistic regression analysis*

	B(SE)	95% CI for OR		
		Lower	OR	Upper
Burnt out (vs engaged)				
Intercept	−1.02*			
Age	−0.44**	0.49	0.64	0.84
Overtime (yes)	−0.26	0.46	0.77	1.28
Work intensity (high)	1.16***	1.89	3.18	5.36
Organisational openness to change (poor)	1.41***	2.42	4.11	7.00
Support (low)	1.55***	2.73	4.62	7.81
Overextended (vs engaged)				
Intercept	0.08			
Age	−0.36**	0.57	0.70	0.86
Overtime (yes)	−0.14	0.58	0.87	1.30
Work intensity (high)	1.30***	2.39	3.65	5.58
Organisational openness to change (poor)	0.44	0.97	1.56	2.51
Support (low)	0.75***	1.41	2.12	3.19
Indifferent (vs engaged)				
Intercept	−0.23			
Age	−0.15	0.69	0.86	1.07
Overtime (yes)	−0.64**	0.33	0.53	0.84
Work intensity (high)	−0.02	0.62	1.02	1.67
Organisational openness to change (poor)	0.35	0.86	1.42	2.36
Support (low)	0.88***	1.56	2.40	3.70

Reference group: Engaged. *$P < 0.05$, **$P < 0.01$, ***$P < 0.001$. CI, confidence interval; OR, odds ratio.

Table 5. *Means and standard deviations of burnout and engagement states*

	Burnt out		Engaged		Overextended		Indifferent	
	M	SD	M	SD	M	SD	M	SD
Job satisfaction	3.14	0.84	4.26	0.62	3.81	0.66	3.88	0.66
Job turnover	3.50	0.90	1.94	1.05	2.77	1.10	2.58	1.17
Health	2.88	0.89	3.56	0.90	3.08	0.87	3.27	0.83
Quality of life	3.46	0.84	4.31	0.66	3.85	0.74	4.13	0.61

The dedication and commitment characteristic of engagement is not likely to protect workers against the negative effects of exhaustion and burnout.

Recommendations for workplace programs and interventions to mitigate burnout and support engagement emphasise the importance of both top-down structural and systemic change as well as bottom-up strategies to support and enhance workers' resilience and coping capacities [14,41]. The present findings highlight the importance of three systemic factors: work intensity; support from co-workers and managers; and an organisational culture open to change and innovation. Organisational leaders clearly play a central role in developing and sustaining favourable organisational cultures [8,41]. The intervention of regulatory and funding bodies is also crucial, to ensure more realistic and secure funding models to support adequate staffing and innovative workforce development strategies that develop the skills and capacity of leaders to facilitate optimal work cultures and practices in AOD organisations.

Study limitations and future research

Cross-sectional studies cannot support causal attributions. Nevertheless, the substantial body of longitudinal and intervention research on the JD-R model [15] bolsters confidence in the proposed directional relationships suggested in this study. Research on reciprocal relationships within the JD-R model indicate

self-perpetuating cycles of impairment or growth are common [14]. Our findings on the poor outcomes of overextended workers may reflect a key transition point in these processes. Longitudinal research may provide useful insight on AOD workers' trajectories of engagement and thriving, or burnout and impairment, particularly for younger workers who are at increased risk of burnout. A wide range of work and personal factors impact on AOD workers' wellbeing. We used multinomial logistic regression to predict four wellbeing states. As this technique analyses every possible combination across the predictors, the number of predictors and levels within predictors, must be limited to minimise the proportion of empty cells which can comprise the veracity of the analysis. Much remains unexplored regarding the job and personal factors that facilitate engagement in AOD workers. The study by Duraisingam *et al.* [8] indicated that leadership, role clarity and personal resources, such as resilience, are important. The present study used data from a larger Australian AOD workforce survey addressing a range of contemporary workforce development issues. Brief measures were chosen to minimise respondent burden and facilitate survey uptake and completion. For example, our measure of burnout focused on exhaustion, which has been highlighted as salient for health and human service professionals [5,17,40]. Additional insights may be gained from future studies addressing other burnout dimensions such as cynicism and reduced professional efficacy [3]. Furthermore, reported levels of burnout were low to moderate for most respondents. It is likely that the simultaneous experience of burnout and engagement would not be observed with high levels of burnout indicating severe distress. Finally, this study considered demands and resources as stand-alone predictors. In real life, these workplace factors are likely to interact to impact workers in more complex and nuanced ways. For example, certain resources (e.g. autonomy) may buffer the effects of particular demands (e.g. high workload) on specific aspects of burnout (e.g. exhaustion) [42].

Conclusion

AOD work is complex and challenging, characteristically combining demanding conditions and profoundly meaningful work. The four wellbeing states explored in this study mirror this complexity and indicate that programs and strategies to prevent burnout and support engagement are priorities to ensure the health and sustainability of the AOD workforce, and the capacity of the workforce to deliver high quality services. Many workforce development challenges facing the AOD field are well documented including the ageing of the workforce [38,43]. Strategies to prevent burnout in younger workers is a particular priority to ensure the future sustainability of the workforce. Less well empirically documented is the motivation, commitment and enthusiasm of AOD workers. This highly dedicated workforce is an essential resource for the AOD sector and its clients, which must be cultivated and protected by strategically focused workforce development that addresses barriers such as excessive demands and insufficient openness to innovation, while building and supporting workers' resilience and capacity.

References

[1] Butler M, Savic M, Best David W, Manning V, Mills Katherine L, Lubman Dan I. Wellbeing and coping strategies of alcohol and other drug therapeutic community workers: a qualitative study. Ther Communities 2018;39:118–28.

[2] Volker R, Bernhard B, Anna K *et al.* Burnout, coping and job satisfaction in service staff treating opioid addicts—from Athens to Zurich. Stress Health 2010;26:149–59.

[3] Demerouti E, Nachreiner F, Bakker AB, Schaufeli WB. The job demands-resources model of burnout. J Appl Psychol 2001;86:499–512.

[4] Green AE, Albanese BJ, Shapiro NM, Aarons GA. The roles of individual and organizational factors in burnout among community-based mental health service providers. Psychol Serv 2014;11:41.

[5] O'Connor K, Muller Neff D, Pitman S. Burnout in mental health professionals: a systematic review and meta-analysis of prevalence and determinants. Eur Psychiatry 2018;53:74–99.

[6] Salyers MP, Bonfils KA, Luther L *et al.* The relationship between professional burnout and quality and safety in healthcare: a meta-analysis. J Gen Intern Med 2017;32:475–82.

[7] Schaufeli W, Shimazu A, Hakanen J, Salanova M, De Witte H. An ultra-short measure for work engagement: the UWES-3 validation across five countries. Eur J Psychol Assess 2019;35:577–91.

[8] Duraisingam V, Roche AM, Kostadinov V, Hodge S, Chapman J. Predictors of work engagement among Australian non-government drug and alcohol employees: implications for policy and practice. Int J Drug Policy 2020;76:102638.

[9] Mäkikangas A, Hyvönen K, Feldt T. The energy and identification continua of burnout and work engagement: developmental profiles over eight years. Burn Res 2017;5:44–54.

[10] Dweck CS, Leggett EL. A social-cognitive approach to motivation and personality. Psychological Review 1988;95:256.

[11] Shirom A. Feeling vigorous at work? The construct of vigor and the study of positive affect in organizations. Research in Organizational Stress and Well-Being 2003;3:135–65.

[12] Timms C, Brough P, Graham D. Burnt-out but engaged: the co-existence of psychological burnout and engagement. J Educ Adm 2012;50:327–45.

[13] Moodie S, Dolan S, Burke R. Exploring the causes, symptoms and health consequences of joint and inverse states of work engagement and burnout: the specific case of nurses in Spain. Manag Res 2014;12:4–22.

[14] Schaufeli WB, Taris TW. A critical review of the job demands-resources model: implications for improving work and health. In: Bauer GF,

Hämmig O, eds. Bridging occupational, organizational and public health: a transdisciplinary approach. Dordrecht: Springer Netherlands, 2014: 43–68.

[15] Lesener T, Gusy B, Wolter C. The job demands-resources model: a meta-analytic review of longitudinal studies. Work Stress 2019;33:76–103.

[16] Crawford E, Lepine J, Rich B. Linking job demands and resources to employee engagement and burnout: a theoretical extension and meta-analytic test. J Appl Psychol 2010;95:834–48.

[17] Lim N, Kim EK, Kim H, Yang E, Lee SM. Individual and work-related factors influencing burnout of mental health professionals: a meta-analysis. J Employ Couns 2010;47:86–96.

[18] Broome KM, Knight DK, Edwards JR, Flynn PM. Leadership, burnout, and job satisfaction in outpatient drug-free treatment programs. J Subst Abuse Treat 2009;37:160–70.

[19] Halbesleben JR. A meta-analysis of work engagement: relationships with burnout, demands, resources, and consequences. Work engagement: a handbook of essential theory and research 2010;8:102–17.

[20] Oser CB, Biebel EP, Pullen E, Harp KLH. Causes, consequences, and prevention of burnout among substance abuse treatment counselors: a rural versus urban comparison. J Psychoactive Drugs 2013;45:17–27.

[21] Beitel M, Oberleitner L, Muthulingam D *et al.* Experiences of burnout among drug counselors in a large opioid treatment program: a qualitative investigation. Subst Abus 2018;39:211–7.

[22] Knudsen HK, Ducharme LJ, Roman PM. Clinical supervision, emotional exhaustion, and turnover intention: a study of substance abuse treatment counselors in the clinical trials network of the National Institute on Drug Abuse. J Subst Abuse Treat 2008;35:387–95.

[23] Matziari A, Montgomery AJ, Georganta K, Doulougeri K. The relationship between organizational practices and values with burnout and engagement. Curr Psychol 2017;36:276–85.

[24] Ancarani A, Mauro CD, Giammanco MD. Linking organizational climate to work engagement: a study in the healthcare sector. Int J Public Admin 2019;42:547–57.

[25] Goering DD, Shimazu A, Zhou F, Wada T, Sakai R. Not if, but how they differ: a meta-analytic test of the nomological networks of burnout and engagement. Burn Res 2017;5:21–34.

[26] Duraisingam V, Pidd K, Roche AM. The impact of work stress and job satisfaction on turnover intentions: a study of Australian specialist alcohol and other drug workers. Drugs 2009;16:217–31.

[27] Landrum B, Knight DK, Flynn PM. The impact of organizational stress and burnout on client engagement. J Subst Abuse Treat 2012;42:222–30.

[28] Skinner N, McEntee A, Roche AM. Australia's Alcohol and Other Drug Workforce: National Survey Results 2019–2020. Adelaide, South Australia: National Centre for Education and Training on Addiction. NCETA: Flinders University, 2020.

[29] Kristensen T, Borritz M, Villadsen E, Christensen K. The Copenhagen burnout inventory: a new tool for the assessment of burnout. Work Stress 2005;19:192–207.

[30] Siegrist J, Starke D, Chandola T *et al.* The measurement of effort–reward imbalance at work: European comparisons. Soc Sci Med 2004;58: 1483–99.

[31] Vander Elst T, De Witte H, De Cuyper N. The job insecurity scale: a psychometric evaluation across five European countries. Eur J Work Org Psychol 2014;23:364–80.

[32] Lehman WEK, Greener JM, Simpson DD. Assessing organizational readiness for change. J Subst Abus Treat 2002;22:197–209.

[33] Taylor J, Bowers D. Survey of organizations. A machine-scored standardized questionnaire instrument. Ann Arbor: Institute for Social Research, University of Michigan, 1972.

[34] Rothrauff TC, Abraham AJ, Bride BE, Roman PM. Occupational turnover intentions among substance abuse counselors. J Subst Abus Treat 2011;40:67–76.

[35] Ware JJ, Sherbourne C. The MOS 36-item short-form health survey (SF-36): I. conceptual framework and item selection. Med Care 1992; 30:473–83.

[36] World Health Organization (WHO). WHOQOL-BREF. Introduction, administration, scoring and generic version of the assessment. Geneva, Switzerland. Available at: https://www.who.int/mental_health/media/en/76.pdf: WHO, 1996.

[37] Hair JF, Black WC, Babin BJ, Anderson RE. Multivariate data analysis, 7th ed. Essex: Pearson; 2014.

[38] McEntee A, Roche AM, Kostadinov V, Hodge S, Chapman J. Predictors of turnover intention in the non-government alcohol and other drug sector. Drugs 2020. [Epub ahead of print].

[39] Van den Broeck A, De Cuyper N, De Witte H, Vansteenkiste M. Not all job demands are equal: differentiating job hindrances and job challenges in the job demands–resources model. Eur J Work Org Psychol 2010;19: 735–59.

[40] Gómez-Urquiza JL, Vargas C, De la Fuente EI, Fernández-Castillo R, Cañadas-De la Fuente GA. Age as a risk factor for burnout syndrome in nursing professionals: a meta-analytic study. Res Nurs Health 2017;40: 99–110.

[41] West CP, Dyrbye LN, Erwin PJ, Shanafelt TD. Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis. Lancet 2016;388:2272–81.

[42] Bakker AB, Demerouti E, Euwema MC. Job resources buffer the impact of job demands on burnout. J Occ. Health Psychol 2005;10:170.

[43] Roche A, Nicholas R. Workforce development: an important paradigm shift for the alcohol and other drugs sector. Drugs 2017;24: 443–54.