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ORIGINAL ARTICLE

What accounts for turnover intention in the Australian public mental health workforce?

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Abstract

High staff turnover is common within the Australian public mental health workforce, contributing to workforce shortages and ultimately impacting the ability to provide stable efficient, effective, and ongoing optimal care to the community. In this study, we aimed to (a) establish the most pertinent factors associated with increased turnover intention in the public mental health workforce in Australia, and (b) establish whether such factors differ between metropolitan and rural services. We used a cross-sectional, correlational design using an online survey method. In total, 235 mental health service staff of various disciplines and levels, from four public hospitals in Victoria, Australia participated in the study. We used three feed-forward multiple regression analyses to assess the study aims. We found that job satisfaction, occupational burnout, and understaffing may be the most pertinent factors to consider regarding turnover intention. Job satisfaction and occupational burnout were factors endorsed across the entire sample, as well as specifically within both the metropolitan and rural services, while understaffing was a pertinent factor regarding turnover intention across the entire sample and for rural services, but not metropolitan services. Our findings regarding the pertinence of job satisfaction, occupational burnout, and understaffing in turnover intention provide key information that may be used to inform interventional targets aimed at reducing attrition from the public mental health workforce in Australia.

KEYWORDS
burnout, job satisfaction, mental health workforce, retention, turnover intention, understaffing

INTRODUCTION

Mental illness affects at least one in five Australians each year, creating a substantial demand for safe, effective, and accessible treatment and care (Australian Bureau of Statistics, 2018). To meet this need, a resilient and sustainable public mental health workforce is essential. However, the Royal Commission into Victoria's Mental Health System highlighted historic underinvestment and growing demand, resulting in an outdated and crisis-driven service that fails to respond adequately to the needs of individuals living with mental illness and their families and caregivers (State of Victoria, 2021). One crucial challenge is the retention of staff in the public mental health workforce (Victorian Auditor General's Office, 2019).

Numerous factors that attract individuals to work in mental health have been identified in the Australian literature. Many of these factors, such as the desire to assist others, the opportunity to make a positive impact, and the ability to apply knowledge and skills within a professional framework, are shared with other healthcare areas (Eley et al., 2010; Jack et al., 2013; Mulcahy et al., 2010; Scanlan et al., 2020, 2021; Scanlan & Still, 2013). However, there are also other motivating factors more specific to joining the mental health workforce including an interest in psychiatry or behaviour, personal experience of mental ill-health, and the recognition and value of discipline-specific roles. (Haywood et al., 2023; Jack et al., 2013; Scanlan et al., 2020, 2021; Scanlan & Still, 2013). However, despite the factors that motivate individuals to pursue a career in mental health, retaining mental health staff within the public sector remains a persistent challenge. Demand for mental health services in Australia continues to increase, while the public mental health workforce suffers from a critical shortage of professionals, particularly in rural regions (State of Victoria, 2021).

The challenges faced by the Australian public mental health workforce are further exacerbated by a shortage of qualified candidates applying for advertised positions, the inability to backfill roles after promotions, and the added demands placed on the workforce due to the COVID-19 pandemic (Crocker, Gnatt, Haywood, Butterfield, et al., 2023; Jiang et al., 2022); these issues have resulted in many services operating with chronic staff shortages (Abeysuriya et al., Hudson & Shen, 2018). In addition to the difficulties in staff retention experienced across the public mental health workforce, generally, rural health services in Australia face additional retention challenges. These challenges include the distance and lengthy travel times between towns, limited transportation options, reduced access to services and amenities for workers and their families, reduced anonymity in smaller communities, smaller team sizes leading to limited opportunities for career advancement, and increased workload resulting from the need to educate other staff (Campbell et al., 2012; Coates & Howe, 2015; Cosgrave et al., 2015b). The existing literature suggests that these challenges faced by the rural Australian healthcare workforce, when compared to the metropolitan workforce, might result in differing primary factors contributing to the retention of staff (Cosgrave et al., 2015a, 2015b, 2018). However, further comparative research is required to more clearly understand these potential differences.

Challenges in retaining staff within the public mental health workforce are not new, and health services have attempted to identify underlying reasons. International research shows that mental health employees cite several job-related challenges such as administrative burden, lack of recognition, insufficient mentoring and supervision, limited opportunities for career progression, burnout, professional isolation and workplace safety concerns as significant issues related to turnover intention (Duxbury, 1999; Jack et al., 2013; O'Connor & Fisher, 2011; Sobekwa & Arunachallam, 2015; Williams, 2012). However, limited recent literature exists that explores the factors associated with turnover intention in the public mental health workforce in Australia. The extant literature primarily focuses on the retention of the mental health of the workforce in only rural Australia (e.g., Cosgrave et al., 2015a, 2015b; Sutton et al., 2011), not specifically with public health services (e.g., Foster et al., 2020), and/or only including a single service or discipline (e.g., Foster et al., 2020; Scanlan et al., 2020; Scanlan & Still, 2019). Overall, this literature suggests that factors such as understaffing, lack of workplace flexibility, occupational burnout, resilience, workplace violence, job satisfaction, and moral injury may contribute to the intention to leave the public mental health workforce. However, there is a lack of understanding of the precise factors that are most pertinent to the intention to leave the public mental health workforce in Australia, especially among multidisciplinary teams across various sites, and if these factors are similar between metropolitan and rural areas. Given multidisciplinary retention difficulties across the Australian public mental health workforce (Victorian Auditor General's Office, 2019), understanding the most pertinent contributing factors regardless of discipline, will inform urgently needed, evidence-based, large-scale multidisciplinary retention targets and strategies. Ultimately, gaining a comprehensive understanding of the most pertinent factors that contribute to the intention to leave the public mental health workforce in Australia is crucial to inform policy and procedure reform and intervention design to improve staff retention.

In this study, we aimed to (a) establish the most pertinent factors that are associated with turnover intention in the public mental health workforce in Victoria, Australia, and (b) ascertain whether such factors differ between metropolitan and rural services.

METHODS

Design

We used a cross-sectional, correlational design using an online survey method. Ethics approval was obtained from the St Vincent's Hospital Melbourne Human

Research Ethics Committee (HREC #008/22) and site approval was obtained by each participating service. The full study protocol can be accessed at (Crocker, Gnatt, Haywood, Bhat, et al., 2023).

Sample and setting

Participants were recruited from four large public health services in Victoria, Australia, two based in metropolitan Melbourne and two in rural Victoria. Staff were invited to participate in the study via the distribution of an online survey within each health service via broadcast emails, posters, flyers, and via snowball sampling. Participants of this study were a sample of current mental health workers across disciplines who were part of a larger workforce study. The survey collected demographic and service data, as well as data from quantitative measures and open-ended responses. Demographic questions included age, gender, highest level of education, discipline, hospital site, health service setting, current employment status, working hours preference, whether they were employed on a contract or an ongoing basis, duration in current position and duration working in mental health. The data used in this study included a subset of the total data collected, pertinent to the current research aims. A conservative (assuming all seven predictors were to be included in the regression models) a priori power analysis was performed in G*Power (version 3.1.9.7) (Faul et al., 2007). The power analysis revealed that, for an estimated medium effect (i.e., $f^2 = 0.20$) a sample size of 80 was required to achieve our goal power of 0.80 at our specified alpha level of 0.05. Data analyses were performed using SPSS Statistics, version 29. The measures utilized are described in detail below.

Measures

Informed by the existing literature, and in addition to the demographic questions, eight measures were used within the current study to understand the factors that account for turnover intention within the population of interest. Each of the measures and their internal consistency indices are listed in the following subsections.

Understaffing

We used a 6-item tool from Hudson and Shen (2018) to evaluate perceptions of understaffing, encompassing two aspects: manpower understaffing and expertise understaffing. The tool required participants to respond on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), to statements related to each relevant subscale. The subscale scores, which ranged from 1 to 5, were calculated by averaging the responses for each relevant subscale, with higher scores indicating greater understaffing. A total understaffing score was calculated by summing the items. The total score was shown to have good-to-very good internal consistency within our sample (Cronbach's Alpha = 0.79).

Workplace flexibility

Participants indicated their organization's level of workplace flexibility, defined as the extent to which their employer was open to, and capable of, adjusting aspects of their work to provide better personal suitability, on a single-item scale of 1–10, with 1 being 'not flexible at all' and 10 being 'very flexible'.

Job satisfaction

To assess overall job satisfaction, a modified version of the 15-item Job Satisfaction Scale (Warr et al., 1979) was utilized with slight variations in wording to suit healthcare workers (i.e., Item 9 "Industrial relation between management and staff" changed to "Relationship between management and workers in your organization"). This is a two-factor measure examining both intrinsic and extrinsic job satisfaction. Intrinsic job satisfaction pertains to internal factors, such as recognition for work done, amount of responsibility given, and opportunities to use skills and knowledge. On the other hand, extrinsic job satisfaction is motivated by external factors, such as remuneration, relationships with colleagues, working conditions, and job security. Participants rated their level of satisfaction on a 5-point Likert scale (ranging from 1 = very dissatisfied to 5 = very satisfied). Subscale scores were computed by averaging the relevant items, while a total score was obtained by calculating the average of all items (range = 1–5), where higher scores indicated greater job satisfaction. The total score was shown to have excellent internal consistency within our sample (Cronbach's Alpha = 0.91).

Employee resilience

Employee resilience was assessed using the 9-item Employee Resilience Scale (Näswall et al., 2015). Participants were asked to rate their level of agreement with statements on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). The total score was obtained by adding up the scores of all items, with a range of 9–45, where higher scores indicated higher levels of resilience in the workplace. This measure was shown to have good-to-very-good internal consistency within our sample (Cronbach's Alpha = 0.80).

Occupational burnout

The level of occupational burnout was evaluated by utilizing the Oldenburg Burnout Inventory (OLBI), which consists of 16 items (Demerouti et al., 2010). Participants responded to each item on a 4-point scale, ranging from 1 (strongly agree) to 4 (strongly disagree). The total score was calculated by summing the scores of all items, with a possible range of 16–64. A higher score indicated a higher level of occupational burnout. This measure was shown to have good-to-very-good internal consistency within our sample (Cronbach's Alpha = 0.88).

Workplace violence

To assess workplace/occupational violence, a modified version of the World Health Organization (WHO) Joint Program on Workplace Violence in the Health Sector questionnaire (WHO, 2002) was used. For this research, we specifically used a single item of the measure. This item assessed the incidence of workplace violence experienced or witnessed (yes/no).

Moral injury

Moral injury refers to the adverse psychological, behavioural, and social effects that individuals may experience as a result of being exposed to particular events. For this study, a modified 8-item version of the 10-item Moral Injury Symptom Scale-Health Professionals (MISS-HP) was used to assess moral injury (Mantri et al., 2020). Respondents rated each item on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The total score was obtained by summing the scores of all items (range = 8–40), with higher scores indicating greater severity of moral injury. This measure was shown to have moderate-to-good internal consistency within our sample (Cronbach's Alpha = 0.72).

Turnover intention

The measurement of turnover intention was conducted using a set of three statements developed by Shah et al. (2010), namely, "I am actively searching for another job," "I will leave as soon as I find another job," and "I frequently contemplate leaving my current position." Participants rated each statement on a three-point scale ranging from "no" to "yes" (1 = no to 3 = yes). An average score was calculated to determine overall turnover intention, where higher scores indicate a greater intention to leave. This measure was shown to have very-good-to-excellent internal consistency within our sample (Cronbach's Alpha = 0.89).

Analyses

Missing data

All cases missing more than 50% of any of the eight measures listed above were excluded from the analyses. Once these cases were removed, missing data analysis was conducted. There was no evidence that the missing data was non-random(Little MCAR's test $p = 0.068$) and thus, the missing data were replaced with Expectation Maximization (EM) for all multiple-item variables as per (Allen et al., 2018).

Correlational analyses

Following the replacement of missing data, we conducted bivariate correlations between the variables to elucidate associations and potential demographic variables to control for, in the main analyses. Following the bivariate correlations, we conducted three feed-forward multiple regression analyses with the aim of establishing the most pertinent variables associated with turnover intention among (1) the overall sample, (2) metropolitan service respondents, and (3) rural service participants. A feed-forward multiple regression approach was chosen as it was best suited to both (a) establish the most pertinent factors associated with turnover intention, as well as (b) mitigate potential multicollinearity concerns related to strongly correlated predictor variables by not forcing the inclusion of each predictor as per a standard multiple regression analysis. For each regression, the criterion variable was Turnover Intention, and the predictor variables were Understaffing, Workplace Flexibility, Job Satisfaction, Employee Resilience, Occupational Burnout, Workplace Violence Incidence, and Moral Injury.

RESULTS

A total of 384 current public mental health workers completed the online questionnaire. After the removal of those who had only completed the demographics, or who had missed more than 50% of items related to any main variable, a total sample of 235 participants remained (metropolitan, $n = 141$, rural $n = 94$). In addition, groups were categorized according to Discipline (i.e., nursing/midwifery, medicine, allied health, and lived experience) and Health Setting (i.e., inpatient, community, inpatient and community, and non-patient-facing). Table 1 provides the demographic characteristics of the sample.

Table 2 shows the mean, standard deviation and range of each of the eight main variables across the total sample, metropolitan services, and rural services. An exploratory one-way MANOVA, Bonferroni corrected

TABLE 1 Sample demographic characteristics.

Characteristic	Total sample $N=235$	Metropolitan $n=141$	Rural $n=94$
Mean age (SD)	43.98 (12.08)	43.35 (11.51)	45.01 (12.98)
Max age	73	73	68
Min age	20	24	20
Prefer not to say	51 (21.7%)	27 (19.4%)	24 (25.5%)
Missing	3 (1.3%)	2 (1.4%)	1 (1.1%)
Gender (%)			
Man	52 (22.1%)	29 (20.6%)	23 (24.5%)
Woman	161 (68.5%)	99 (70.2%)	62 (66.0%)
Non-binary/gender diverse	5 (2.1%)	5 (0.7%)	0 (0.0%)
Prefer not to say	17 (7.2%)	8 (5.7%)	9 (9.6%)
Education (%)			
Primary/secondary	6 (2.5%)	3 (2.1%)	3 (3.2%)
TAFE/diploma	26 (11.1%)	11 (7.8%)	15 (16.0%)
Undergraduate	73 (31.1%)	45 (31.9%)	28 (29.8%)
Postgraduate	96 (40.9%)	60 (42.6%)	36 (38.3%)
Other	33 (14.0%)	22 (15.6%)	11 (11.7)
Missing	1 (0.4%)	0 (0%)	1 (1.1%)
Employment status (%)			
Full-time	136 (57.9%)	74 (52.5%)	62 (66.0%)
Part-time	87 (37.0%)	57 (40.4%)	30 (31.9%)
Casual	12 (5.1%)	10 (7.1%)	2 (2.1%)
Setting (%)			
Inpatient	70 (29.8%)	40 (28.4%)	30 (31.9%)
Community	122 (51.9%)	69 (48.9%)	53 (56.4%)
Inpatient & community	12 (8.9%)	16 (11.3%)	5 (5.3%)
Non-patient-facing	22 (9.4%)	16 (11.3%)	6 (6.4%)
Discipline			
Nursing/midwifery	118 (50.2%)	62 (44.0%)	56 (59.6%)
Medicine	21 (8.9%)	15 (10.6%)	6 (6.4%)
Allied health	53 (25.5%)	36 (25.4%)	17 (18.2%)
Lived experience	9 (3.8%)	5 (3.5%)	4 (4.3%)
Management/ administration	20 (8.5%)	15 (10.6%)	5 (5.3%)
Other	14 (6.0%)	8 (5.7%)	6 (6.4%)
Mean years in role (SD)	6.55 (7.15)	6.24 (6.55)	7.08 (8.1%)
Max	33	26	33
Min	0	0	0
Missing	54 (22.9%)	27 (19.2%)	27 (28.7%)
Years in MH (SD)	13.45 (10.98)	14.40 (10.23)	13.53 (12.21)
Max	45	36	45
Min	0	1	0
Missing	49 (20.9%)	25 (16.7%)	24 (25.5%)

for multiple comparisons, indicating that the eight main variables showed no significant differences between metropolitan and rural service locations.

TABLE 2 Descriptive statistics and MANOVA results comparing each variable across location.

	Location	Mean	Std. deviation	p (metro vs rural)
Understaffing ($p=0.191$)	Metro	23.26	4.58	0.191
	Rural	24.05	4.51	
	Total	23.57	4.56	
Workplace flexibility ($p=0.204$)	Metro	6.05	2.36	0.204
	Rural	6.46	2.47	
	Total	6.21	2.405	
Job satisfaction ($p=0.065$)	Metro	50.42	11.59	0.065
	Rural	47.37	13.38	
	Total	49.20	12.40	
Employee resilience ($p=0.380$)	Metro	37.62	4.77	0.380
	Rural	37.06	4.71	
	Total	37.40	4.74	
Occupational burnout ($p=0.838$)	Metro	40.00	7.67	0.838
	Rural	40.21	8.04	
	Total	40.09	7.81	
Workplace violence ($p=0.874$)	Metro	1.47	0.501	0.874
	Rural	1.48	0.502	
	Total	1.47	0.500	
Moral injury ($p=0.788$)	Metro	16.61	5.66	0.788
	Rural	16.80	4.46	
	Total	16.69	5.19	
Turnover intention	Metro	1.86	0.757	0.541
	Rural	1.92		
	Total	1.88		

Note: p = probability statistic from the MANOVA analysis comparing metropolitan to rural in each domain. p is significant at 0.05, Bonferroni adjusted for multiple comparisons.

To explore the associations between the eight variables of interest, we then conducted a range of bivariate correlations. The correlation matrix is provided in Table 3. Of the 28 associations, 26 were significant, with the only non-significant associations being understaffing and employee resilience, and employee resilience and workplace violence. Turnover intention was significantly associated with each of the variables.

Multiple regression analyses

Overall sample

A stepwise feed-forward multiple regression analysis was used to uncover what were the most pertinent factors that accounted for turnover intention across the entire sample. The final model included Job Satisfaction, Occupational Burnout and Understaffing. Table 4 illustrates the final model, which accounted for 53.8% of the variance in turnover intention ($R^2=0.538$, $F_{(3, 231)}=89.77$,

TABLE 3 Bivariate correlations.

	Understaffing	Workplace flexibility	Job satisfaction	Employee resilience	Occupational burnout	Workplace violence	Moral injury	Turnover intention
Understaffing	–							
Workplace flexibility	−0.154*	–						
Job satisfaction	−0.306**	0.566**	–					
Employee resilience	−0.097	0.203**	0.331**	–				
Occupational burnout	0.370**	−0.347**	−0.622**	−0.369**	–			
Workplace violence	−0.288**	0.222**	0.353**	0.121	−0.357**	–		
Moral injury	0.168**	−0.202**	−0.452**	−0.252**	0.500**	−0.401**	–	
Turnover intention	0.376**	−0.434**	−0.660**	−0.232**	0.645**	−0.291**	0.362**	–

*Correlation is significant at the 0.05 level (2-tailed); **Correlation is significant at the 0.01 level (2-tailed).

TABLE 4 Feed-forward multiple regression: Rural.

	Unstandardized coefficients		Standardized coefficients			Correlations		
Model[a]	B	Std. error	Beta	*t*	Sig.	Zero-order	Partial	Part
Overall sample ($N=235$)								
Job Satisfaction	−0.025	0.004	−0.407	−7.098	<0.001	−0.660	−0.423	−0.317
Occupational Burnout	0.034	0.006	0.346	5.878	<0.001	0.645	0.361	0.263
Understaffing	0.021	0.008	0.124	2.561	0.011	0.376	0.166	0.114
Metropolitan sub-sample ($n=141$)								
Job Satisfaction	−0.028	0.005	−0.436	−5.888	<0.001	−0.636	−0.448	−0.359
Occupational Burnout	0.035	0.007	0.351	4.740	<0.001	0.600	0.374	0.289
Rural sub-sample ($n=94$)								
Occupational Burnout	0.039	0.009	0.398	4.225	<0.001	0.707	0.407	0.281
Job Satisfaction	−0.021	0.006	−0.354	−3.758	<0.001	−0.693	−0.368	−0.250
Understaffing	0.028	0.013	0.162	2.199	0.030	0.456	0.226	0.147

[a]Dependent variable: Turnover intention.

$p>0.001$). Lower levels of job satisfaction were associated with higher turnover intention while higher levels of occupational burnout and understaffing were associated with higher levels of turnover intention. Job satisfaction accounted for the most unique variance in turnover intention (10.05%), followed by Occupational Burnout (6.92%) and Understaffing (1.25%).

Metropolitan

A second step-wise feed-forward multiple regression analysis was used to uncover the most pertinent factors associated with turnover intention specifically within the metropolitan services. The final model included Job Satisfaction and Occupational Burnout which differs from the total sample's final model which also included Understaffing. Table 4 illustrates the final model. The final model accounted for a significant 48.8% of the variance in turnover intention ($R^2=0.488$, $F_{(2, 138)}=65.83$, $p>0.001$). Lower levels of job satisfaction were associated with higher turnover intention while higher levels of occupational burnout were associated with higher levels of turnover intention. Job satisfaction accounted for the most unique variance in turnover intention (12.89%) followed by Occupational Burnout (8.35%).

Rural

A third step-wise feed-forward multiple regression analysis was used to explore the most pertinent factors that were associated with turnover intention, specifically within rural services. Like the overall sample, the final model included Job Satisfaction, Occupational Burnout, and understaffing. Table 4 illustrates the final model. The final model accounted for a significant 60.00% of variance in turnover intention ($R^2=0.600$, $F_{(3, 90)}=45.09$, $p<0.001$). Lower levels of job satisfaction were associated with higher turnover intention while higher levels of occupational burnout and understaffing were associated with higher levels of turnover intention. Occupational Burnout accounted for the most unique variance in turnover intention (7.90%) followed by Job Satisfaction (6.25%) and Understaffing (2.16%).

Overall, even though the eight variables did not significantly differ between metropolitan and rural

services, the pertinent factors and/or their predictive utility differed between the entire sample, the metropolitan sample, and the rural sample. This suggests that there may be differing primary drivers of turnover intention depending on the location of the service. Occupational burnout and job satisfaction were common predictors of turnover intention across locations, while understaffing was a common predictor of turnover intention for the total sample and the rural services, but not for the metropolitan services.

DISCUSSION

The aim of this research was to establish the most pertinent factors associated with turnover intention in the public mental health workforce in Australia and explore whether such factors differ between metropolitan and rural services. In line with previous research, we found that each variable measured, Understaffing, Workplace Flexibility, Job Satisfaction, Employee Resilience, Occupational Burnout, Workplace Violence, and Moral Injury, were significantly correlated with turnover intention across the sample. However, job satisfaction, occupational burnout, and understaffing emerged as the most important parameters for staff, providing important knowledge to inform theory development regarding turnover intention as well as focused interventions.

Job satisfaction emerged as a pertinent predictor across the entire sample, as well as for both metropolitan and rural samples. This parallels international findings across healthcare areas that find reliable associations between job satisfaction and turnover intentions (Ali & Anwar, 2021; Chao et al., 2015; Delobelle et al., 2011; Lu et al., 2002). Indeed, within the mental health workforce job satisfaction has consistently been claimed to be an important factor impacting turnover intention. For example, Scanlan and Still (2019) found that job satisfaction was moderately-to-strongly negatively associated with turnover intention in a sample of managers and clinicians in Australian mental health services. Evidence regarding what factors determine greater job satisfaction in the mental health workforce is still emerging, but existing evidence suggests that these factors include collegial support and leadership as well as lower workloads (Luther et al., 2017; Scanlan & Still, 2013). Cottrell (2001) suggested that to enhance job satisfaction of mental health nurses, and to help reduce stress, a multilevel approach across individual, group, and organizational levels are required, and can include primary, secondary, and tertiary interventions. For example, on the individual level, a primary intervention may include psychoeducation, whilst a secondary intervention may include improved clinical supervision, and a tertiary intervention can include psychotherapy. Interventions across the group level can include team building (primary), workload analysis (secondary), and therapeutic remedial teamwork (tertiary), while interventions at the organizational level can include role clarification (primary), mission clarification (secondary), and cultural change (tertiary) (Cottrell, 2001). While Cottrell (2001) provides a useful framework for developing interventions to increase job satisfaction, further research is required to better understand the factors that drive job satisfaction within the public mental health workforce.

Occupational burnout was another factor that was to be related to turnover intention across the overall sample, as well as for both metropolitan and rural samples. Like low job satisfaction, occupational burnout is consistently associated with turnover intention in the mental health workforce and has been claimed to be a key factor driving turnover (e.g., Scanlan & Still, 2019; Summers et al., 2020). This finding sits in parallel to research from healthcare staff generally who have also consistently found associations between burnout and turnover intention (Aiken et al., 2023; Laschinger & Fida, 2014) Staff of mental health services have previously been found to have particularly high levels of occupational burnout (Summers et al., 2020). Indeed, our sample had a mean burnout score of 40.09, well above the cut-off of >35, which indicates high burnout (Summers et al., 2020). Scanlan and Still (2019) also found burnout to be associated with turnover intention in the Australian mental health workforce, and interestingly, Yanchus et al. (2017) found that among mental health professionals, job satisfaction predicted turnover intention through its impact on emotional exhaustion (a key aspect of occupational burnout). While findings suggest that both job satisfaction and occupational burnout are independently important factors regarding turnover intention, future research should further explore the functional relationship between these variables and turnover intention. Multiple interventions have been developed with the goal of ameliorating occupational burnout in the mental health workforce with varying degrees of success (see Morse et al., 2012). One promising approach to minimizing burnout, and perhaps turnover intention, is clinical supervision. A higher quality and quantity of clinical supervision is often shown to be associated with lower burnout among healthcare workers, an improved workplace environment, and ultimately a minimisation of staff turnover (Edwards et al., 2006; Gravestock, 2023; Hyrkäs, 2005; Martin et al., 2021; O'Connor et al., 2018). However other research has shown that clinical supervision alone may not be adequate to improve mental health worker burnout in some settings (i.e., forensic psychiatry) (Berry & Robertson, 2019). Ultimately, developing a better understanding of the direct, and indirect, functional relationships between burnout, other pertinent variables, and turnover intention within the Australian public mental health workforce may inform the development of tailored, multi-level interventions.

Understaffing was found to be a pertinent factor that accounted for the turnover intention in the

overall sample, and for the rural sub-sample, but not in the metropolitan sub-sample. Exacerbated by the COVID-19 pandemic, understaffing in the public mental health workforce has been cited as a significant public health issue (e.g., Crocker, Gnatt, Haywood, Butterfield, et al., 2023), and one of the most severe workforce shortages in rural Australia is in mental health services (Cosgrave et al., 2018). Interestingly, our metropolitan and rural samples did not significantly differ in their perception of the degree of understaffing, but it was the rural services in which understaffing emerged as contributing to turnover intention. Globally, understaffing is commonly found to be associated with healthcare workers' turnover intentions across metropolitan and rural areas (Arslan Yurumezoglu & Kocaman, 2016; Choi et al., 2011; Cosgrave et al., 2015a, 2018; Hayes et al., 2012; Poon et al., 2022). Qualitative evidence suggests that when rural healthcare services in Australia are adequately staffed, a primary reason that existing staff may consider leaving the service is to live in metropolitan areas (Cosgrave et al., 2018). However, when rural services are understaffed, understaffing is the primary reason for turnover intention instead of metropolitan relocation (Cosgrave et al., 2018). Overall, this suggests that even though retention of mental health staff in rural areas faces multiple unique challenges, including staff desire to live in metropolitan areas, adequate staffing may be key to minimizing turnover intention. These findings regarding the pertinence of understaffing across metropolitan and rural areas regarding turnover intention within the Australian public mental health workforce may be key to informing intervention design.

Limitations and directions for future research

This study has three primary limitations. First, there is potential for our participants' responses to not accurately reflect the entire population of interest. This is a common limitation among non-mandatory, opt-in survey designs. Participants were also only from four healthcare sites, and all within Victoria, Australia, and the overall and within-group sample size was modest. There is also potential for bias, particularly through the use of mono-method approach and self-report instruments, however the primary use of validated instruments minimizes this potential. Future research should therefore look to replicate and extend this study within other larger samples, services, and locations, as well as use a multi-method (i.e., organizational workplace violence data) multi-informant approach.

Second, we used a feed-forward regression approach. This approach is particularly useful to establish the smallest number of factors that account for the maximum proportion of variance in turnover intention. The establishment of a small collection of factors with large predictive utility is particularly useful to inform the choice of interventional targets among many potential targets. However, this approach does have drawbacks. For example, the approach is data-driven and a-theoretical: this provides useful bottom-up model development, but does not allow for the inclusion of particular variables based on available theory (see Flom & Cassell, 2007; Harrell, 2001). Regardless, considering the lack of theoretical development regarding the consistent drivers of turnover intention, this approach was best suited to the study aims.

Lastly, we did not model potential interactions and mediators within our approach. For example, Yanchus et al. (2017) found job satisfaction to be associated with turnover intention through emotional exhaustion (an aspect of occupational burnout). However, our results have provided a smaller set of potential key variables related to turnover intention that should inform future theory and model development and testing. This future research should use approaches including linear structural equation modelling, and dynamic alternatives such as network modelling, artificial neural networks, and computational modelling (e.g., see Haywood et al., 2022; Haywood & Baughman, 2021).

Conclusion

Overall, our results suggest that job satisfaction, occupational burnout, and understaffing may be the most pertinent factors to consider regarding turnover intention within the Australian public mental health workforce. Job satisfaction and occupational burnout may seem pertinent across the entire sample, as well as the metropolitan and rural services, while understaffing pertained across the entire sample and for rural services, but not metropolitan services. These results provide key information that may be used to inform interventional targets aimed at reducing the turnover intention of the public mental health workforce in Victoria, Australia.

Relevance for clinical practice

This research provides key information for service leaders as well as policymakers, with the goal of reducing turnover intention in the public mental health workforce. Our results suggest that job satisfaction and occupational burnout should be a common interventional target across metropolitan and rural services, while understaffing should be a key interventional target in rural services.

AUTHOR CONTRIBUTIONS

Darren Haywood, Kaitlyn M. Crocker, Inge Gnatt and Zoe Jenkins developed the research question. All

authors contributed to data collection. Darren Haywood analysed the data and wrote the initial draft. All authors provided edits and feedback. All authors contributed to the development and approved the final manuscript.

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CONFLICT OF INTEREST STATEMENT

The authors have no conflicts of interest to disclose.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

ETHICAL APPROVAL

Ethics approval was obtained from the host site Human Research Ethics Committee (008/22) and site approval was obtained by each participating service. Participants provided written consent for participation and research publication.

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