



The Australian nursing and midwifery academic workforce: A cross-sectional study

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ABSTRACT

Aim: To explore the demographics, employment characteristics, job satisfaction and career intentions of the Australian nursing and midwifery academic workforce.

Background: The academic workforce is crucial in preparing the next generation of nurses and midwives. Thus, understanding current satisfaction, challenges, opportunities and intentions is important for recruitment and succession planning.

Design: Cross-sectional online Australian academic nursing and midwifery survey.

Method: Respondents were invited to complete an online survey via social media platforms, advertisements on professional websites and circulation via professional associations. Descriptive and inferential statistics were used to analyse the data.

Results: Of the 250 respondents, most were Registered Nurses (n=212), female (n=222), held tenured teaching and research positions (n=126) and were over the age of 50 (n=130). Almost half of respondents held a PhD (n=98), with 55 (43.7 %) of those without a Doctoral qualification indicating no intention in undertaking doctoral studies. Over 85 % (n=213) of respondents indicated working regular unpaid hours. Female respondents had a significantly higher mean annual teaching allocation compared with males who had higher research workload allocations (p=0.033). Job satisfaction and intention to leave academia were linked with workload and perceived value. Job satisfaction was significantly higher among teaching-only and research-only academics (p=0.005).

Conclusion: The sustainability of the Australian nursing and midwifery workforce is at risk due to an ageing workforce and some academics' lack of intention in pursuing doctoral studies. Gender inequities emerged as a finding in this study. Workforce strategies are required to address gender disparities and workload imbalances that have an impact on job satisfaction.

1. Introduction

Internationally, there is concern about the lack of doctoral-qualified nursing and midwifery academics and the subsequent risk of not having a suitably qualified academic workforce to prepare the next generation of healthcare professionals (Albarran and Rosser, 2014; Flynn and Ironside, 2018; Redeker, 2021; Worthy et al., 2020). The lack of succession planning within academia, coupled with the lack of nurses and midwives willing to step into academic roles due to issues such as

workload and pay rates, heightens the fragility of the future education of the nursing and midwifery workforce (Albarran and Rosser, 2014; DeZure et al., 2014; Sessler Branden and Sharts-Hopko, 2017). The impending high retirement rate within the academic workforce and the undersupply of doctorally-prepared nurses to take their place, has corresponded with a rapid rise in enrolments into nursing programs (Australian Government Department of Health, 2020; Worthy et al., 2020). Likewise, in midwifery there is increase in demand to educate future midwives, which are regulated separately in various countries

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(Australia, Ireland, New Zealand, UK), yet there is a decline in midwifery academics to do so (Royal College of Midwives, 2020). Furthermore, meeting growing workforce demands has led to the increased casualisation of the academic workforce and a decline in tenured positions across the academic sector (Croucher, 2023).

Before the COVID-19 restrictions, the nursing academic workforce in Australia was considered to have the capacity to sustain an academic pipeline (Schwartz, 2019). However, the pandemic exacerbated academic workloads, created budgetary pressures on universities and brought about an unprecedented rise in early retirements among experienced academics (Littleton, 2022). During the first year of the COVID-19 lockdowns, an estimated 40,000 tertiary education positions in Australia were lost, with over 90 % of these full-time positions (Littleton, 2022). Not only did this create a significant drain of expertise, but it also overburdened the remaining academics, many of whom needed to rapidly develop and deliver online learning to replace face-to-face teaching (Singh et al., 2020; Timmins et al., 2022).

2. Background

Systemic pressure to teach, research, publish, perform additional administrative work and undertake governance roles had an impact on the job satisfaction, research quality, stress and burnout of early career researchers and academics (Christian et al., 2021; Singh et al., 2021). Conversely, good leadership and management, feeling valued and having confidence in career progression have been shown to have a positive impact on job satisfaction (Christian et al., 2021). However, to date, little has been done to explore the contemporary nursing and midwifery academic workforce and understand if the appropriate scaffolding is in place to support and develop this vital workforce, so they remain in the profession (Timmins et al., 2022). The research that has been done, highlights a workforce under pressure (Singh et al., 2020, 2021). Therefore, this study aimed to explore the demographics of the current Australian nursing and midwifery academic workforce and the employment characteristics, job satisfaction and future career intentions to inform workforce sustainability and future workforce growth.

3. Materials and methods

3.1. Study design

This descriptive cross-sectional study used an online survey to explore the Australian nursing and midwifery academic workforce.

3.2. Participants & recruitment

The survey link was disseminated through professional networks, social media and professional bodies, including the Australian and New Zealand Council of Deans of Nursing and Midwifery for circulation to the relevant Heads of Schools/Departments. All nursing and midwifery academics working in schools/faculties of nursing and midwifery at any Australian tertiary institution were invited to participate. Data were collected between June – December 2022. For correlation analysis with a medium effect size (0.3), an α of 0.05 and a power of 0.95 G*Power (Faul et al., 2007) estimated that a sample of 134 was required.

3.3. Data collection

The survey was delivered via Qualtrics and took approximately 15–20 minutes to complete. The survey tool was developed through a review of the literature and an exploration of other piloted tools used in similar research (2021; Christian et al., 2021, Coussens et al., 2017, NCSES, 2017; Phou, 2014; Royal College of Nursing, 2024; Vitae, 2018), while also seeking expert input. The final survey tool was divided into 6 sections - personal demographics, employment details, workload, satisfaction, mentoring and research track record. Personal

demographics included age, gender, language spoken, location, previous education and registration type (Christian, 2021). Employment details included items such as type of employment, length of academic employment, position level and areas of expertise (Bell and Yates, 2015, Christian, 2021, NCSES, 2017). The third section contained items related to workload that explored the mix of responsibilities within the current role, unpaid work, activities undertaken and balancing personal and professional responsibilities (Bell and Yates, 2015, Christian, 2021). Section four explored respondents' satisfaction with various aspects of the academic role, each rated on a 5-point Likert scale (1 – Very dissatisfied to 5 – Very satisfied) (Bell and Yates, 2015, Christian, 2021). Respondents were also asked about factors that could be changed to improve their job satisfaction, how valued they felt by their employer and how long they intended to remain in academia (Bell and Yates, 2015, Christian, 2021). In section five, respondents were asked about their involvement in mentoring programs (Bell and Yates, 2015, Christian, 2021). The final section, research track record, explored experience in research supervision, publications, grant writing engagement/success and opportunities for research capacity building (Bell and Yates, 2015, Christian, 2021). Given the volume of data, this paper focuses on the demographics, employment characteristics, workload, job satisfaction and future career intentions. Other aspects of the survey are presented separately (Authors own).

3.4. Data analysis

Data were exported from Qualtrics into SPSS Version 28.0.1.0 for analysis. Responses were checked for completeness and any responses missing more than 50 % of the data were excluded (n=50). In 80 % of cases participants only completed demographic questions. Data analysis undertook a comprehensive analytical approach, encompassing descriptive statistics, parametric and non-parametric tests. Independent sample t-tests were employed to identify differences in mean outcomes between two mutually exclusive groups or to identify inter-group differences. Chi-square tests were used to explore relationships used to determine whether the frequency in each category (nurse/midwife and other variables) under study is different from what would be expected if there were no association between the categories (Terry and Hills, 2024). The effect size (Phi) was delineated as small (0.1), medium (0.3) and large (0.5) (Colman, 2008). Fisher's exact test was utilised when more than 20 % of cells had expected frequencies less than 5. Statistical significance was defined as $p \leq 0.05$ (Pallant, 2020).

3.5. Ethical approval

This study was approved by the Human Research Ethics Committee of XXXX (Approval No XX). Completion of the survey was considered implied informed consent and a participant information page was provided at the start of the survey.

4. Results

4.1. Demographics

Of the 300 surveys commenced, those with greater than 50 % incomplete were removed from the analysis the remaining 250 (83.3 %) had minimal missing data. Unsurprisingly, most respondents were female (n=222; 88.8 %) and Registered Nurses (RNs) (n=212; 84.8 %) (Table 1). Respondents' mean age was 50 years (SD 10.07), with 17.2 % (n=43) aged 61 years or over. Most respondents (n=232; 92.8 %) reported English as their first language and 3.6 % (n=9) identified as Aboriginal or Torres Strait Islander.

Nearly half of the respondents (n=124; 49.6 %) held either a PhD (n=98; 39.2 %) or a Professional Doctorate (n=26; 10.4 %). Of those without a Doctoral qualification (n=126; 50.4 %), 11.9 % (n=38) were currently enrolled in a Doctoral program, 30.1 % (n=32) had plans to

Table 1
Demographic characteristics.

	n	%
Gender		
Female	222	88.8
Male	28	11.2
Age (mean 50 years; SD 10.07)		
<40 years	49	19.6
41–50 years	71	28.4
51–60 years	87	34.8
≥61 years	43	17.2
Category of Registration		
Registered Nurse	212	84.8
Registered Midwife	25	10.0
Registered Nurse & Midwife	5	2.0
Nurse Practitioner	5	2.0
Missing	2	0.8
Highest qualification		
PhD	98	39.2
Professional Doctorate	26	10.4
Masters	101	40.4
Graduate Certificate	12	4.8
Bachelor/Hons	13	5.2
Plans to enrol in Doctoral Program (n=126)		
Do not plan to enrol	55	43.7
Currently enrolled	38	11.9
Intend to enrol	32	30.1
Missing	1	0.8
Employment type		
Tenured	158	63.2
Fixed term contract	51	20.4
Casual	38	15.2
Other	3	1.2
Current position		
Contracted tutor/marker	45	18.0
Associate Lecturer	7	2.8
Research Fellow	5	2
Lecturer	106	42.4
Senior Lecturer	27	10.8
Associate/Assistant Professor	22	8.8
Professor	26	10.4
Emeritus Professor	3	1.2
Adjunct	2	0.8
Other	7	2.8
Years in sector		
≤5 years	85	34.0
6–10 years	54	21.6
11–15 years	66	26.4
16–20 years	22	8.8
>20 years	23	9.2
Teaching/research profile		
Teaching only position	75	30.0
Research only position	16	6.4
Teaching and research position	126	50.4
Other (Administration roles)	31	12.4
Missing	2	0.8
Regularly works unpaid hours (n=208)		
<5 hours	49	23.0
5–10 hours	68	31.9
10–20 hours	74	34.7
20–30 hours	9	4.2
>30 hours	8	3.8
Missing	5	21.3

enrol in one and 43.7 % (n=55) had no plans to undertake Doctoral studies. A non-significant relationship was confirmed between gender and highest qualification ($X^2(2, 250) = 4.182, p=0.124$), although no male respondents reported qualifications below Masters' level.

4.2. Employment

Just over half (n=158; 63.2 %) of respondents reported holding a tenured position, with 15.2 % (n=38) reporting casual employment (Table 1). Twenty-five (10.0 %) respondents held a conjoint university and health service appointment. Just under half (n=106; 42.4 %) of

respondents were employed as Lecturers and only 2.8 % (n=7) were employed as Associate Lecturers. While 34.0 % (n=85) had been employed in academia for five years or less, 44.4 % (n=111) had worked in academia for over 10 years. No significant relationships were found between gender and age ($X^2(44, 250)=5.360, p=0.055$); employment tenure ($X^2(1, 250)=0.084, p=0.432$) or duration of academic employment ($X^2(4, 250)=2.80, p=0.591$). There was, however, a significant association found between qualification type and tenure ($X^2(8, 250)=43.96, p<0.001$). Of the tenured respondents a little less than two-thirds (n=100; 63.3 %) held a Doctoral qualification, compared with 32.3 % (n=51) with a Master's qualification.

Approximately half of the respondents (n=126; 50.4 %) were employed in teaching and research positions and 30.0 % (n=75) were employed in teaching-only positions. In contrast, only 6.4 % (n=16) of respondents reported being employed in research-only positions. Overwhelmingly, 85.2 % (n=213) of respondents described regularly working unpaid hours. Among those respondents who provided further detail on the unpaid hours regularly worked, approximately one-third (n=74; 34.7 %) described working 10–20 unpaid hours per week and slightly fewer (n=68; 31.9 %) identified working 5–10 unpaid hours per week. Position type had a significant effect on working unpaid hours, with respondents in blended teaching and research positions more likely to report unpaid work ($F(3) = 7.314, p<0.001$).

4.3. Workload

There was a statistically significant relationship with a medium effect size ($d=0.370$) between gender and mean annual teaching allocation as a proportion of overall workload ($t(250) = 1.847, p=0.033$), with female respondents carrying a larger teaching proportion (n=222, M 48.47, SD 18.7) compared with male respondents (n=28, Mean 36.4, SD 26.7). Specifically, 47.8 % of females had 51 %-100 % of their workload allocated to teaching compared with 32.2 % of males, while 21.4 % of males had 51 %-100 % of their workload allocated to research compared with 4.1 % of females (Table 2).

Master-qualified male respondents were significantly more likely to have small teaching allocations (n=5; 35.7 %) compared with Masters-qualified female respondents (n=12; 14.3 %) ($X^2(1, 236) = 3.843, p=0.050$). Similarly, PhD-qualified male respondents were more likely to carry smaller teaching allocations (n=5; 41.7 %) when compared with female PhD-qualified respondents (n=33; 32.7 %), although this difference did not reach statistical significance ($X^2(1, 236) = 3.099, p=0.412$). Just under half (n=12; 42.9 %) of male respondents reported no teaching allocation in their workload, compared with one-quarter (n=57; 25.7 %) of female respondents.

A statistically significant relationship (medium effect size $d 0.619$) was also confirmed between gender and mean annual workload research allocation ($t(250) = -3.087, p<0.001$). The mean research allocation for female respondents was 13.7 %, which was close to half that of male respondents (25.9 %). The proportion of governance/administration within the workload allocation was similar between genders (Female M=20.9; Male M=21.4). Whereas male respondents were disproportionately represented in those carrying more than 50 % research allocation (21.4 %, n=6), compared with female respondents (4.1 %, n=9),

Table 2
Workload allocations by gender and teaching/research profile.

Workload proportion	% of total workload Teaching		% of total workload Research	
	Female	Male	Female	Male
	N (%)	N (%)	N (%)	N (%)
0–25 %	57 (25.7)	12 (42.9)	134 (60.4)	12 (42.9)
26–50 %	59 (26.6)	7(25.0)	79 (35.6)	10 (35.7)
51–75 %	59 (26.6)	5 (17.9)	2 (0.9)	2 (7.1)
76–100 %	47 (21.2)	4 (14.3)	7 (3.2)	4 (14.3)

($X^2(3, 250) = 14.36$) $p=0.002$ (Table 3).

Tenured respondents reported statistically significant lower levels of satisfaction with their overall workload (M 2.66, SD 1.26) compared with non-tenured staff (M 3.40, SD 1.30) ($t(250) = 2.44, p=0.009$). Tenured staff reported significantly ($t(250) = 5.467, p=0.007$) lower satisfaction (M 2.79, SD 1.318) with both teaching load (M 3.30, SD 1.511) and research opportunities ($t(250) = 5.460, p=0.020$) compared with non-tenured staff.

Examining satisfaction with workload opportunities according to workload profile confirmed that research-only academics reported statistically significantly higher satisfaction compared with all others (d 1.02–1.67). There was no significant difference in satisfaction with research opportunities according to tenure, with tenured academics reporting marginally lower satisfaction (M 2.52, SD 1.31) compared with non-tenured staff (M 2.58, SD 1.51).

Most respondents wanted to spend more time on research activities ($n=169, 75.1\%$) and less time undertaking administrative work ($n=172, 76.8\%$). A statistically significant difference occurred between teaching and research academics ($p\leq 0.001$) and academics in administration roles ($p\leq 0.001$) who wanted more time to spend undertaking research. Those who were teaching only academics were more likely to want to continue the same amount of teaching tasks ($p\leq 0.001$), while research-only academics wanted to continue to do the same amount of training and supervision tasks ($p\leq 0.001$).

Academic staff demonstrated how they were managing their current professional and personal responsibilities, highlighting more than half ($n=115, 51.3\%$) agreed they can manage the demands of the profession and home life, more than half (125, 56.0%) agreed work schedules provides flexibility to take care of demands at home and more than half (132, 59.0%) agreed their supervisor understands when demands at home interfere with professional responsibilities. There were no other significant differences detected when examining gender differences and balancing professional and personal responsibilities, there were no significant differences between males and females. Differences between gender and demands at home have slowed down progress on professional activities showed males were more likely to agree or strongly agree home had a greater impact ($n=15, 55.5\%$) compared with females ($n=90, 45.7\%$) ($X^2(2, 224) = 5.540, p=0.057$).

4.4. Job Satisfaction and career intentions

The mean level of job satisfaction was 3.1, rated on a 5-point Likert scale (range 1.1–5.0; SD 0.9), confirming slightly positive satisfaction. Table 4 summarises job satisfaction scores according to workforce characteristics. Both teaching in an area of expertise ($t(243) = 3.42, p\leq 0.001$) and having a research-only work profile ($t(244) = 2.62, p=0.009$) were significantly and positively associated with job satisfaction. These differences had a medium effect size (d 0.475). Respondents who planned to leave within the next 12 months reported a statistically significant ($t(91) = 3.12, p=0.002$) lower level of job satisfaction (M 2.81) compared with those planning to stay (M 3.54) with a large effect size for this difference (d 0.683). Lastly, satisfaction was examined with work profile, which demonstrated profile

Table 3
Amount of time wanting to spend on key tasks.

	Time would like to spend on key tasks			
	Less	The same	More	N/A
	N (%)	N (%)	N (%)	N (%)
Research	7 (3.1)	27 (12.0)	169 (75.1)	22 (9.8)
Teaching	64 (28.7)	89 (39.9)	43 (19.3)	27 (12.1)
Training/Supervision	14 (6.3)	79 (35.5)	86 (38.4)	45 (20.1)
Administration work	172 (76.8)	31 (13.8)	3 (1.3)	18 (8.0)
Committees and meetings	100 (44.6)	87 (38.8)	19 (8.5)	18 (8.0)
Service	39 (17.3)	113 (50.2)	47 (20.9)	26 (11.6)

Table 4
Job satisfaction.

Demographic characteristic	Mean overall satisfaction (SD)	t (df)	P value
Gender			
Male	3.66 (.918)	-1.70 (244)	0.463
Female	3.47 (1.28)		
English is first language			
Yes	3.50 (1.24)	.302 (244)	0.763
No	3.41 (1.42)		
Tenured employment			
Yes	3.39 (1.24)	-1.074 (244)	0.090
No	3.67 (1.23)		
Teaching only work profile			
Yes	3.65 (1.21)	1.260 (243)	0.209
No	3.43 (1.26)		
Research only work profile			
Yes	4.54 (1.24)	2.627 (244)	0.009*
No	3.45 (1.42)		
Work unpaid hours each week			
Yes	3.45 (1.22)	-1.646 (243)	0.101
No	3.82 (1.29)		
Teaching in area of expertise			
Yes	3.67 (1.17)	3.42 (224)	<0.001*
No	3.09 (1.28)		
Plan to remain in academia			
Next 5 years	3.04 (0.84)	2.237 (92)	0.028*
Up to 1 year	2.60 (0.92)		

satisfaction scores were neutral between overall workload (M 2.93; SD 1.32), teaching load (M 2.98; SD 1.3=1.41) and service provision (M 2.88; SD 1.33), with the level of satisfaction lowest for research opportunities (M 2.54; SD 1.35).

As indicated in Table 5, when comparing overall satisfaction among differing academic profiles and all other staff, satisfaction with teaching load was significantly higher among teaching-only academics ($t(237) = 2.8, p=0.005$) with a medium effect size (d 0.393). Similarly, satisfaction among research-only academics was significantly higher for research load ($t(240) = 6.49, p\leq 0.001$) with a small effect size (d 0.167), teaching load ($t(239) = 3.53, p\leq 0.001$) with a medium effect size (d 0.110) and service provision ($t(240) = 3.95, p\leq 0.001$) with a medium effect size (d 0.102).

Results demonstrated that 49.2% ($n=123$) of respondents agreed (21.2% neither agreed or disagreed) that their institution recognised and valued their contribution they make to teaching and learning. The mean score was 3.45 rated on a 5-point Likert scale (range 1.0–5.0; SD1.17). Academics being recognised for their contribution to teaching and learning and its connection to the length of time they were planning to remain in academia was not significant ($X^2(16,222) = 19.946, p=0.223$). For example, those who planned to stay in academia were more likely to disagree or strongly disagree ($n=46, 20.7\%$) that their institution recognised and valued their contribution to teaching and lecturing. In addition, there was no significant difference between academic profiles and the length of time wanting to remain in nursing/midwifery and academia ($F(3245) = 1.511, p=0.212$). However, there was a significant difference between academic satisfaction and the length of time wanting to remain in nursing/midwifery and academia ($F(4223) = 2.985, p=0.020$, where those wanting to stay the next 10 years (M 3.31) were more likely to be satisfied than those academics who only plan to remain in nursing and midwifery academia for the next 12 months (M 2.60).

5. Discussion

This study has provided new insight into the Australian nursing and midwifery academic workforce. The findings explored the demographics, employment characteristics, workload, job satisfaction and future career intentions of this group. As such they raise several issues of concern that should be addressed to promote sustainability and

Table 5
Satisfaction with workload opportunities according to work profile.

Workload profile	Mean Satisfaction (SD)	Mean Satisfaction (SD)	t(df)	P value	Cohens d
Teaching only (n=75)	Teaching Only	All Other			
Research opportunities	2.23 (1.40)	2.63 (1.32)	-1.47 (238)	0.141	-
Teaching load	3.36 (1.29)	2.81 (1.43)	2.80 (237)	0.005	0.393
Service provision	3.00 (1.25)	2.84 (1.37)	0.821 (238)	0.412	-
Research only (n =16)	Research only	All Other			
Research opportunities	4.50 (.730)	2.40 (1.27)	6.49 (240)	<0.001	1.67
Teaching load	4.30 (1.18)	2.90 (1.38)	3.53 (239)	<0.001	1.10
Service provision	4.12 (1.14)	2.78 (1.31)	3.95 (240)	<0.001	1.02
Blended teaching and research (n =126)					
Research opportunities	2.36 (1.44)	2.56 (1.33)	-766 (239)	0.444	-
Teaching load	3.33 (1.37)	2.93 (1.37)	1.45 (238)	0.073	-
Service provision	3.16 (1.32)	2.84 (1.32)	1.23 (239)	0.217	-
Other (n=31)	Other	All other			
Research opportunities	2.33 (1.44)	2.56 (1.33)	-0.766 (239)	0.444	-
Teaching load	3.33 (1.60)	2.9 (1.37)	1.45 (238)	0.073	-
Service provision	3.16 (1.44)	2.84 (1.32)	1.23 (239)	0.229	-

(1= Very dissatisfied, 5= Very Satisfied; 3 = Neutral)

workforce quality as well as driving future workforce growth.

Current evidence highlights gender disparities in the Australian academic workforce, with male respondents having smaller teaching allocations and greater research allocations than female respondents. This finding aligns with (and partially explains) other evidence of gender disparities in nursing that sees men overrepresented in elite positions (Evans, 2008). Ioannidis et al. (2019) compiled data on 100,000 scientists, assessing their career-long and single-year research impact using standardized indices. Spanning from 1996 to 2017, the data offered insights into various research fields. Unsurprisingly, the nurse scientists in the Australia/New Zealand region, were predominately female and registered nurses (Ioannidis et al., 2019). However, in a field where women dominate, over a quarter of the named nursing scientists were men. Despite women boasting higher publication rates and citation metrics, men consistently ranked higher, echoing broader issues of gender disparity in nursing (Jackson et al., 2022). In Australian nursing academia, gender inequity extends to leadership roles, academic settings and funding opportunities, exacerbated by the lack of structural support for research in nursing practice (Jackson et al., 2022).

An Australian study found that female RNs felt that male nurses benefitted from informal networks that supported and fast-tracked their careers (Gauci et al., 2022). Additionally, it was felt that males were groomed for promotion and opportunities, while female nurses felt invisible and that they had less access to career enhancement opportunities (Gauci et al., 2022). The lower teaching workloads and more research time afforded to male respondents in this survey likely assists in career fast-tracking in nursing academia. To mitigate gender-based disparity, efforts must be made in ensuring gender equity in academic workloads and in ensuring that opportunities for mentoring and career fast-tracking are available to all, regardless of gender.

Similar to the broader concept of the ageing nursing and midwifery workforce, there have been concerns about the ageing workforce in nursing and midwifery academia for many years (Smith and Crookes, 2012; Wyllie et al., 2016). The findings of this study highlight that the ageing academic workforce continues to be an issue in Australia. This is exacerbated by difficulties in recruiting nurses and midwives into academic careers. These difficulties are linked to a range of factors, including lack of pay parity between the academic and clinical settings, need for nurses and midwives to gain clinical experience, difficulties transitioning across and between the sectors and the desirability of doctoral qualifications for employment (Jackson et al., 2011). To ensure a sustainable academic workforce, there is a need to provide pathways that will encourage nurses and midwives into academic pathways earlier in their careers. Additionally, there is a need for more support and advocacy for doctoral and post-doctoral education among nurses and midwives (Stirling et al., 2024).

Respondents in this study reported undertaking significant amounts of unpaid work. Such unpaid work has been reported in the literature as a common feature of academic life (Miller, 2019; Smithers et al., 2023). A key finding of this study was that many respondents overwhelmingly identified a desire to do fewer administrative and clerical tasks within their role. Indeed, reductions in this area of their workload may have freed time to engage in the academic tasks being done during paid working time rather than beyond their working hours. The effective and efficient use of academic staff has attracted some interest in the literature internationally (Graham, 2015). While it is generally agreed that the issues of staff workload and performance are inextricably linked, little traction has been gained in developing robust models to support staff workload management (Candela et al., 2015; Graham, 2015; Miller, 2019). The findings of this study highlight a need for nurse and midwife academics to actively engage in discussion about workload metrics and ensure that such metrics capture the complexities of nursing and midwifery academia, such as clinical placement, professional engagement and professional development. Only by taking a seat at the table will the needs of nurse and midwife academics be promoted.

Notably, in this study, a considerable number of respondents indicated they had no plans to undertake doctoral training, however, undertaking doctoral studies is not always supportive of teaching trajectories which some nursing/midwives enter academia to pursue (Dreifuerst et al., 2016). Within the Australian tertiary sector, it can be very difficult to progress an academic career without a doctoral qualification. Although completing doctoral training was a key feature of academic tenure, it may not be adequate motivation to undertake such training. This finding is in contrast to nursing academics internationally, where doctoral studies are the foundation of both promotion and tenure (Dreifuerst et al., 2016). Nevertheless, the reasons for this within the Australian context are unclear and warrant further investigation. Therefore, understanding the reasons for not wanting to pursue this qualification, beyond the mismatch between pursuing doctoral studies and being adequately prepared for teaching, is important to inform career development and support strategies for individuals and for a sustainable academic workforce (McNelis et al., 2019).

It was noted there were lower levels of satisfaction among those teaching and research academics with tenure compared with those who were untenured. This finding was in concert with among nursing academics in the US (Lee et al., 2017), however, was in contrast to findings from South Korea which indicated tenured academics have a propensity to be more satisfied due to better and more stable working conditions (Lee, 2023). Within the context of this study, it was found that more satisfied academics were working on research activities and less on administrative tasks. This finding echoes other research where greater job satisfaction is linked to research and publishing productivity, while

greater undergraduate teaching load had an impact on satisfaction (Hesli and Lee, 2013; Singh et al., 2020). Those who were research only or teaching only had greater job satisfaction, which may suggest undertaking roles that do not match career goals and expectations among academics may have some bearing on the satisfaction (Chung et al., 2010; Wyllie et al., 2016). Conversely, it may be the competing teaching, administration and research task among research and teaching academics leads to dissatisfaction, however, this also warrants further investigation.

This study demonstrated that those who planned to leave had significantly lower levels of job satisfaction and were more likely to have shorter lengths of academic employment. Worthy et al. (2020) advocate those who are more satisfied are more likely to remain in the academic workforce. Although not related to feeling valued by their institution for their contribution, addressing job satisfaction along with workload issues is crucial to academic staff retention (Singh et al., 2020). This study has highlighted several key issues that are likely to have an impact on satisfaction, including workload equity, total workload, diversity of tasks and opportunities for growth and development. Addressing these issues needs collaboration between nursing and midwifery and academic groups to seek solutions that recognise the nuances of these practice-based professions.

5.1. Limitations and strengths

This study used a cross-sectional design and relied on advertisements, snowballing and social media recruitment methods. Additionally, as the number of nursing and midwifery academics working in Australia is unknown, it is not possible to identify the response rate achieved. However, the sample provided a cross-section of nursing and midwifery academics from various locations and demographic backgrounds. Considering the descriptive nature of this study, generalisability could only be considered within similar academic contexts.

6. Conclusion

Results from this study provide an overview of the current Australian nursing and midwifery academic workforce. The results indicate gender disparities exist within the workforce in relation to teaching and research workloads and highlights the fragility of the workforce due to age, intentions to stay and intentions to complete doctoral studies. Strategies to increase the attraction towards an academic career and supports that foster academic growth and career trajectory are needed to sustain the nursing and midwifery academic workforce into the future.

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Ethical statement

The study was approved by the Human Research Ethics Committee of the University of New England (Approval No HE22-128)

CRedit authorship contribution statement

Marie Hutchinson: Writing – review & editing, Writing – original draft, Methodology, Formal analysis, Data curation, Conceptualization. **Elizabeth Halcomb:** Writing – review & editing, Writing – original draft, Formal analysis, Data curation, Conceptualization. **Leah East:** Writing – review & editing, Writing – original draft, Validation, Resources, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Debra Jackson:** Writing – review & editing, Writing – original draft, Conceptualization. **Daniel Terry:** Writing – review & editing, Writing – original draft, Formal

analysis.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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