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Research paper

Research activity among the Australian nursing and midwifery academic workforce: A cross-sectional study

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ABSTRACT

Background: Research in nursing and midwifery continues to grow and inform evidence-based practice. However, intentions to pursue an academic research pathway and heavy teaching workloads impede research outcomes in academia, with the nursing and midwifery academic workforce being at particular risk.
Aim: Determine research activity among the nursing and midwifery academic Australian workforce and explore how academic roles, qualifications, tenure, and workload profiles influence research engagement, productivity, and outcomes.
Methods: An online survey was circulated throughout Australian universities, social media platforms, and professional websites. Data were analysed using descriptive and inferential statistics.
Results: Of the 250 respondents, the majority (n=164) were research-active and were employed in blended teaching and research roles (n = 126). Tenured academics reported a significantly higher rate of research-active status ($p \leq 0.001$). The mean number of papers published in the previous 12 months was 3.31 (Standard Deviation [SD] 2.28), with a career mean of 26.47 (SD 46.25). Respondents who were research active were engaged in Higher Degree Research (HDR) supervision, and research-active academics were more likely to apply for and be successful in grant outcomes ($p < .001$); however, they had lower levels of satisfaction with workload.
Discussion: Job security through tenure is significantly associated with research activity, indicating that research productivity may be lost through non-tenured positions. Whilst research-active respondents were engaged in HDR supervision, which is essential for workforce growth and scholarship, a significant portion were not, placing the workforce pipeline at risk.
Conclusion: Research activity in academia is essential for tenure and to support evidence-based practice. By fostering enabling research environments, the contribution of nursing and midwifery academics to support evidence-based practice and scholarship can be enhanced.

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Summary of relevance

Problem or Issue

Limited evidence exists on the characteristics of the Australian nursing and midwifery academic workforce encompassing research activity.

What is already known

Research is essential to inform evidence-based nursing and midwifery practice.

What this paper adds

This paper provides evidence of the research activity and disparities among the nursing and midwifery academic workforce and highlights how employment type, workloads, and roles influence research performance and outcomes.

1. Introduction

The nursing and midwifery academic workforce is currently facing significant challenges, including faculty shortages, an increased demand for tertiary education, and the need to adapt to evolving healthcare environments (East, Halcomb, Terry, Jackson, & Hutchinson, 2024). Academic roles are varied, complex, and are underpinned by higher education pillars including teaching, research, and service/administration/community engagement (Kenny & Fluck, 2022; Muthama & McKenna, 2023). Whilst these pillars underscore the breadth of core university business, teaching and its associated workload often take precedence over research activities. Increases in administration tasks, the often hidden workload associated with academic duties and the pressure to produce quality research outputs, has led to unrealistic research expectations and a disconnect between workload reality and research outcomes (Kenny & Fluck, 2022, 2023). Furthermore, an academic's research performance, which is often measured by outputs or grant capture, may not equate to, or acknowledge, the research work that may or may not lead to successful measurable research outcomes (Kenny & Fluck, 2018). For example, Australia's National Health and Medical Research Council reports grant success rates as being around 10–15% (Blakely, 2022). This means that some 85–90% of applicants have expended significant time to prepare a grant application that will not directly result in an outcome that is recognised by their institution.

Whilst there is no universal definition of what constitutes a research-active academic, being research-active is intrinsically linked with research activity. Notably, this is about research dissemination through conferences and journal papers, scholarly book chapters, applying for and generating research income, undertaking research projects, and supervising Higher Degree Research (HDR) candidates (Kenny & Fluck, 2018). The research expectations for academics can also vary widely depending on the nature and level of appointment and are influenced by institutional and disciplinary norms and expectations (Kenny & Fluck, 2023).

Nursing has a long history with research stemming from Florence Nightingale's work in the nineteenth century. However, nursing research and nursing academia only became recognised in the late 20th century (Halcomb, 2021), with nursing research outputs increasing significantly over the last two decades (Yanbing, Hua, Chao, Fenglan, & Zhiguang, 2021). Although acknowledged as a foundation for evidence-based nursing and midwifery practice, there is a need for strategies to build research capacity amongst clinicians to increase participation in research (Zhu, Xia, Fu, Dai, & Xiao, 2024). For many clinicians, research can be perceived as foreign and daunting, and this can also be so for those wanting to transition into education and academia (Jackson et al., 2015).

Recent Australian research has indicated that many nursing and midwifery academics and contracted tutors have no intention to build research capacity by completing Doctoral studies (East et al., 2024). Literature also indicates a wide variation of research output and citation rates among nursing and midwifery academics. For example, an H-Index of 11–12 is considered the norm for UK nursing/midwifery professors (Thompson & Watson, 2010; Watson, McDonagh, & Thompson, 2016); a higher H-index of 14 has been found among Australian nursing and midwifery professors (range 1–33) (McKenna, Cooper, Cant, & Bogossian, 2017), while in the US, an H-Index of 20 among nursing professors has been considered the norm (Broome, Oermann, Douglas, Simmons, & Woodward, 2019). Noting these variances and the increased pressure experienced in academia, this study aimed to examine the research activity among the Australian nursing and midwifery academic workforce.

2. Aim

The aim of this study was to examine the research activity of the Australian nursing and midwifery academic workforce, and explore how academic roles, qualifications, tenure, and workload profiles influence research engagement, productivity, and outcomes.

3. Methods

3.1. Study design

A cross-sectional online survey was undertaken to determine workload profiles, research and scholarship productivity, and work satisfaction among Australian nursing and midwifery academics. Data were collected in June–December 2022 as part of a larger nursing and midwifery academic workforce survey. Details on the development of the nursing and midwifery academic workforce survey tool and other aspects of the findings are reported elsewhere (Author's Own).

3.2. Participants and recruitment

Nursing and midwifery academics currently employed in Nursing Schools across Australia were invited to participate in this study. Participants were recruited via advertisement through professional nursing and midwifery bodies and associations, university and professional networks, and social media. For correlation analysis with a medium effect size (0.3), an α of 0.05, and a statistical power of 0.95, the software G*Power estimated that a sample size of 134 participants was needed (Faul, Erdfelder, Lang, & Buchner, 2007).

3.3. Data collection

Qualtrics software was used for the online survey. Key measures examined employment demographics, such as type of employment, duration in academic roles, position level, and areas of expertise, and academic workload, including the distribution of workload, unpaid work, activities undertaken, and personal and professional responsibilities. Participants were also asked to rate their satisfaction with various aspects of their academic roles and were asked about potential changes to improve job satisfaction, their sense of being valued by their employer, and their intentions to remain in academia. Four facets of job satisfaction were rated on a 5-point Likert scale, where 1 = Very Dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, and 5 = Very Satisfied. These facets were satisfaction with work opportunities (9 items), satisfaction with workload allocation (3 items), organisation values resource management capabilities (2 items), and organisation values research activity (3 items). These scales demonstrated acceptable reliability and internal consistency with a Cronbach's alpha of 0.78 (Christian, Johnstone, Larkins, Wright, & Doran, 2021). Lastly, participants were asked to provide data about their research track record. This encompassed research supervision responsibilities, publications, grant writing and successes, and research capacity building.

3.4. Data analysis

Data were exported from Qualtrics into SPSS Version 28.0.1.0 for analysis. A 'research-active' variable was created to identify participants who supervised HDR research candidates and, in the last two years, had applied for external research funding, had been listed as a chief investigator on a successful internal, or had been listed as a chief investigator on a successful external research grant. Given the variety of ways to define 'research active' in the literature and across institutions, consensus on this definition was achieved through expert discussion, ensuring the criteria reflected meaningful engagement with research activities. It must be noted that publications were separated from this research activity due to publications being reported over a 12-month and career duration.

The data were analysed using descriptive statistics, parametric, and nonparametric tests. Independent sample t-tests were employed to identify intergroup differences, while two-way Analysis of Variance (ANOVA) was employed to examine the interaction effects between two independent variables on a dependent variable. Following a significant interaction effect in the two-way ANOVA, a simple main effects analysis was conducted to further explore the nature of the interaction between the independent variables. Effect sizes (Phi) were categorised as small (0.1), medium (0.3), and large (0.5) (Colman, 2015). 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). Frequency effect size was calculated to illustrate productivity and was calculated by dividing the number of activities by the total number of possible activities, providing a ratio reflective of the proportion of time spent on tasks relative to the overall workload.

3.5. Ethical approval

This study was approved by the Human Research Ethics Committee of The University of New England (Approval No HE22-128). Completion of the survey was considered implied informed consent, with a participant information sheet being incorporated at the commencement of the survey.

4. Results

Two hundred and fifty surveys were completed or partially completed. The majority of respondents were registered nurses (n = 212, 87.6%), followed by individuals who were both a registered nurse and midwife (n = 25, 10.3%), and registered midwives (n = 5, 2.1%). Some respondents, 34.8% (n = 85), were employed on fixed-term contracts and adjunct roles. Most respondents were employed in blended teaching and research roles (n = 126, 50.8%), followed by teaching-only roles (n = 71, 28.6%), governance and administration (n = 31, 12.5%), and research-only roles (n = 16, 6.4%). Slightly fewer than half (n = 113, 48.3%) of respondents were employed in Associate Lecturer or Lecturer roles, with n = 27 (11.5%) employed as a Senior Lecturer. Of the 53.2% (n = 124) respondents holding Doctoral qualifications, most held a Doctor of Philosophy (n = 98, 42.0%). Just over 11.1% (n = 26) of those with Doctoral qualifications had a Professional Doctorate. Around one-third (n = 89, 38.2%) held a Coursework Master's degree, and fewer than 5.5% (n = 13) had the highest qualification as an undergraduate (Bachelor's or Honours) degree (Table 1).

Table 1
Demographic profile of research-active and research-inactive participants.

		Research active N (%)	Not research active N (%)	Exact Sig
Gender (n=250)				.515
	Male	18 (64.3)	10 (35.7)	
	Female	146 (65.7)	76 (34.3)	
Age (n=246)				.378
	< 40	27 (60.0)	18 (40.0)	
	41–50	45 (59.2)	26 (40.8)	
	51–60	50 (64.9)	27 (35.1)	
	≥61	40 (75.5)	13 (24.5)	
Highest qualification (n=249)				.001**
	Doctoral studies (PhD, DP)	121 (97.5)	3 (2.5)	
	Masters (MPhil, Coursework)	36 (36.0)	64 (64.0)	
	Bachelor/Graduate Certificate	6 (24.0)	19 (76.0)	
Academic level (n=234)				.001**
	Contracted tutor/marker	5 (13.2)	33 (86.8)	
	Associate Lecturer	4 (57.1)	3 (42.9)	
	Lecturer	71 (66.9)	35 (33.1)	
	Senior Lecturer	25 (92.5)	2 (7.5)	
	Research Fellow	5 (100.0)	0 (0.0)	
	Associate Professor	22 (100.0)	0 (0.0)	
	Professor	26 (100.0)	0 (0.0)	
	Senior Professor (Emeritus)	3 (100.0)	0 (0.0)	
Tenured (n=250)				.001**
	Yes	131 (82.9)	27 (17.1)	
	No	33 (35.8)	59 (64.2)	
Employment contract (n=247)				.001**
	Tenured	131 (82.9)	27 (17.1)	
	Fixed term	27 (52.9)	24 (47.1)	
	Casual	5 (13.1)	33 (86.9)	
Workload profile (n=248)				.001**
	Teaching only	11 (14.6)	64 (85.4)	
	Research only	16 (100.0)	0 (0.0)	
	Teaching & Research	126 (60.0)	0 (0.0)	
	Governance & other	11 (35.5)	20 (64.5)	

** $p \leq 0.01$.

Table 2
Publication productivity by academic characteristics.

	No. who published in previous 12 months		No. who have published over their career	
	n (%)	Frequency effect size	n (%)	Frequency effect size
Teaching/research profile (N = 250)				
Research only (n = 15)	13 (86.6)	0.87	15 (100.0)	1.00
Governance and other (n = 30)	12 (40.0)	0.40	18 (60.0)	0.60
Research and teaching (n = 116)	97 (83.6)	0.84	103 (88.7)	0.89
Teaching only (n = 63)	20 (31.7)	0.32	38 (60.3)	0.60
Missing (n = 26)	-	-	-	-
Highest qualification (N = 250)				
Professional Doctorate (n = 24)	23 (95.8)	0.96	24 (100.0)	1.00
Masters of Philosophy (n = 12)	11 (91.7)	0.92	11 (91.7)	0.97
Doctor of Philosophy (PhD) (n = 91)	82 (90.1)	0.90	85 (93.4)	0.93
Coursework Masters (n = 80)	25 (31.2)	0.31	47 (58.7)	0.58
Bachelors, Hons, Grad cert (n = 19)	3 (15.7)	0.16	6 (31.6)	0.32
Missing (n = 24)	-	-	-	-
Tenure (N = 250)				
Tenured (n = 147)	115 (78.2)	0.78	124 (84.3)	0.84
Non-tenured (n = 79)	30 (37.9)	0.38	49 (62.0)	0.62
Missing (n = 24)	-	-	-	-

4.1. Research active status

Most respondents (n = 164, 70.4%) were currently research active. Research-active status was significantly associated with the respondent's highest qualification ($p \leq 0.001$), and most (n = 121, 73.7%) of those who were research active held Doctoral qualifications. Those who were not currently research-active were predominantly in mid-level academic roles (Lecturer-Senior Lecturer).

4.2. Work profile

Examining tenure and work profile demonstrated statistically significant differences. Tenured academics reported a significantly higher rate of research-active status ($p \leq 0.001$). The teaching and research work profiles were also a significant factor in research activity ($p \leq 0.001$). Respondents in research-only roles had the highest rate of research activity (n = 16, 100.0%), followed by blended teaching and research roles (n = 126, 60.0%). In contrast, 14.6% (n = 11) of teaching-only academics were the least research-active.

4.3. Publication activity

Of the 226 respondents who answered or partially completed this section of the survey, the mean number of papers published in the previous 12 months was 3.31 (Standard Deviation [SD] 2.28), with a median of 3 (interquartile range [IQR] = 4). The career mean number of publications was 26.47 (SD 46.25), with a median of 8 (IQR = 24). A little over a third (n = 81, 35.8%) of respondents had not published in the previous year, while 6.6% (n = 15) had published more than 10 papers (range 10–30). In terms of total career publication patterns, 17.2% (n = 39) had never published, while 15.0% (n = 34) had published over 50 papers and 9.3% (n = 21) more than 100 papers (Table 2). Respondents with a coursework Master's as their highest qualification had low levels of publication productivity, with 58.7% (n = 47) of the sample not publishing in the last 12 months. More highly publishing respondents were those in research-only or research and teaching positions.

A two-way ANOVA was conducted to examine the effect of academic role and tenure on publications in the previous year. Simple main effects analysis showed that academic role ($p \leq 0.001$) and tenure ($p = 0.048$) were both significantly associated with publication rates. There was also a statistically significant interaction effect between tenure and academic role and publication $F(8206, 256\ p = 0.011)$.

Table 3
Number of research candidates supervised (n = 103).

	Number of PhD research candidates supervised (n = 103)		Number of Master of Philosophy candidates supervised (n = 75)	
	1-3	≥4	1-3	≥4
Research Active	50 (48.5%)	53 (51.3%)	36 (48.6%)	38 (51.4%)
Not Research Active	0 (0%)	0 (0%)	1 (100.0%)	0 (0%)

4.4. Research supervision

Among the 164 respondents who were research active, 103 (62.8%) were supervising PhD candidates, while the remainder, 61 (37.2%), were supervising Master of Philosophy students. Nonsupervising faculty (n = 122, 52.3%) were largely employed in teaching-only (n = 67, 54.8%) and research-only (n = 42, 34.9%) roles. Unsurprisingly, those who were more likely to supervise HDR students had research and teaching positions ($p < 0.001$) and were tenured ($p < 0.001$). Slightly fewer than half of the respondents who were research supervisors (n = 50; 48.4%) were supervising 1–3 PhD candidates, while 53 (51.3%) were supervising more than 5 candidates (Table 3).

A two-way ANOVA was performed to examine the effect of work role and tenure on the total number of HDR candidates supervised. Simple main effects analysis showed that neither academic role nor employment type was significantly associated with the number of HDR candidates supervised ($p = 0.215$). The estimated marginal means for the number of HDR candidates supervised according to faculty employment profile indicated that faculty members on fixed-term contracts, particularly those in positions at the level of Associate/Assistant Professor and above, are estimated to supervise a higher number of HDR candidates compared to their peers (see Fig. 1).

Approximately one-third (n = 36; 27.9%) of respondents described that research supervision was allocated to their teaching workload, while 50.4% (n = 65) of respondents had supervision allocated within their research workload. The remaining 21.7% (n = 28) indicated that HDR supervision was accounted for in both teaching and research workload, neither teaching or research, not formally counted, or were unsure of how hours were allocated.

4.5. Research funding

Just over half of the 233 respondents to this section of the survey had applied for a grant in the past two years (n = 124, 53.2%), with 42.7% (n = 53) being successful with an internal grant and 39.8% (n =

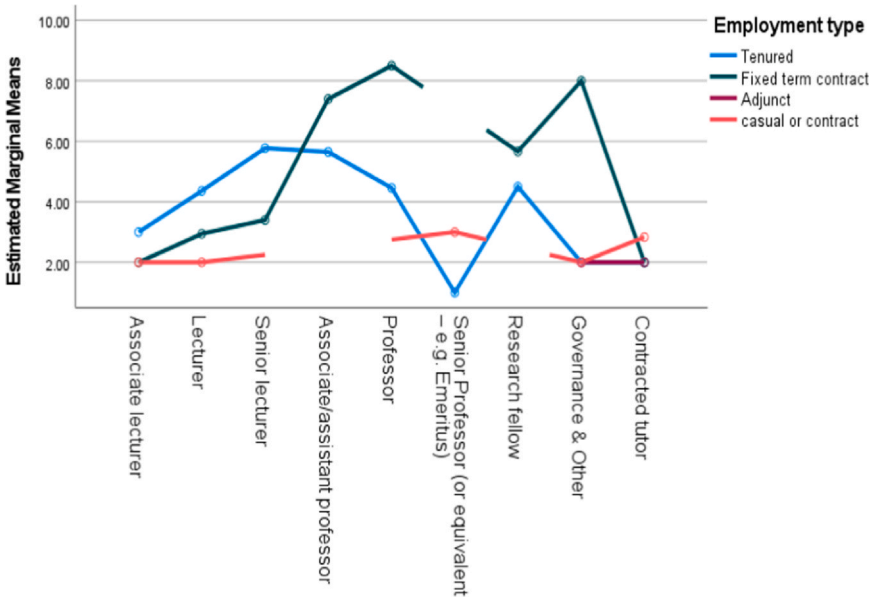

Fig. 1. Estimated marginal means for number of HDR candidate supervised according to academic characteristics (n=225).

Table 4
Research grant productivity by research active status in the past 24 months.

	Research active n (%)
Grants applied Total (n = 124)	114 (91.1)
Internal grants Total (n = 53)	
– Successful	51 (96.2)
– Unsuccessful	2 (3.8)
– CI on an internal grant	53 (100.0)
– Funding received Total (n = 51)	
<$100,000	35 (68.6)
≥$100,000	16 (31.3)
External grants Total (n = 49)	
– Successful	40 (81.7)
– Unsuccessful	2 (4.1)
– Missing	7 (14.2)
– CI on an external grant	45 (100.0)
– Funding received Total (n = 45)	
<$100,000	32 (71.1)
≥$100,000	11 (24.5)
Missing	2 (4.4)
Grants applied with missing details Total (n = 22)	-

49) being successful with an external grant. Overall, the mean number of successful grants in the previous year was 3.04 (SD 1.45) for internal grants and 3.11 (SD 1.52) for external grants.

Almost three-quarters (n = 35; 68.6%) of respondents received less than $100,000 in internal grant funding, whereas 24.5% (n = 11) had received the same amount in external grant funding. Table 4 reports grant success according to academic characteristics. Unsurprisingly, research-active academics were more likely to apply for and be successful in grant outcomes (p < .001).

4.6. Job satisfaction among active and research-inactive academics

Considering the four factors measuring work satisfaction, in most cases, there were no significant differences between groups associated with organisational values related to resource management and research activity, and satisfaction with work opportunities. However, research-active respondents demonstrated significantly lower levels of satisfaction with workload allocation when compared to their non-research-active counterparts (p = 0.002) (Table 5).

5. Discussion

This study provides a comprehensive analysis of the research activity within the Australian nursing and midwifery academic workforce. The findings reveal significant variations in research activity, influenced by academic roles, qualifications, tenure, and workload profiles. This underscores the complexity of balancing research and teaching responsibilities within an academic framework and highlights the systemic and individual factors shaping research engagement and productivity. Many respondents were defined as being research active, with research activity strongly associated with the highest academic qualification attained, notably a Doctoral qualification. This aligns with prior research emphasising the pivotal role of doctoral qualifications in fostering academic research productivity (Broome et al., 2019; Porter, 2018). However, the disparity in research activity among those in teaching-only and blended teaching and research roles points to persistent challenges

Table 5
Job satisfaction among active and research inactive academics.

Criteria	Research active Mean (SD)	Not research active Mean (SD)	P value
Satisfaction with workload allocation	2.74 (1.15)	3.24 (1.14)	0.002*
Satisfaction with work opportunities	3.05 (0.88)	3.27 (0.85)	0.091
Organisation values resource management capabilities	2.96 (0.91)	2.82 (0.88)	0.287
Organisation values research activity	2.89 (1.03)	2.66 (0.91)	0.124

*p≤0.05

in integrating research with heavy teaching workloads. Academics in teaching-only roles were significantly less likely to be research active, and this aligns with workload models for teaching-only and teaching-focused academics, who will have minimal to no research time allowance in their workloads. This has significant implications for the scholarship of teaching and learning and the positioning of universities as higher education institutions.

Publication patterns further illustrate the uneven distribution of research output. While a significant proportion of respondents had published in the previous year, a notable subset (32.4%) reported no publications during this period. This reflects a broader trend of variability in research productivity within academia (Broome et al., 2019; Porter, 2018). Moreover, career-long publication trends show that a minority of academics achieve stronger publication output, indicating that high productivity in terms of publications may be concentrated among a smaller segment of the academic workforce (Halevi, Moed, & Bar-Ilan, 2016). Further research needs to consider how this group can be recognised for this productivity, as well as how others can be developed to build this kind of capacity.

Tenure status emerged as a critical determinant of research activity, with tenured academics demonstrating higher rates of research engagement and output. This finding highlights the protective role of tenure, with its associated benefits and continuing employment, in fostering a stable and supportive environment for research activity and productivity. Conversely, those on fixed-term or casual contracts reported significantly lower research activity, reinforcing concerns about the precarious nature of academic employment for a significant segment of the workforce and its impact on long-term research productivity (Smithers, Spina, Harris, & Gurr, 2022). Often, these contracts are heavily concentrated toward filling teaching gaps and can also reflect the soft-funding nature of research, where employment is tied to externally funded projects. Academics in these roles may be primarily engaged in delivering on others' research agendas, with limited institutional support or opportunity to develop their own research track record, further compounding the challenges to sustained research engagement (Harris, Smithers, Spina, & Heffernan, 2022).

The study also highlights the role of research supervision in research activity. Doctoral supervision is essential to the future academic workforce and to continuing to develop the knowledge needed to meet the needs of the nursing and health professions (Stirling, McCormack, Salamonson, Edward, & Jackson, 2024). The findings of this study reveal that most research-active academics were active in supervising HDR candidates. However, slightly fewer than half were supervising three or fewer candidates. While this may allow supervisors to devote sufficient time to providing a quality research training experience, further work is needed to explore how such supervision fits within academic workloads and impacts other measures of scholarly productivity. On the other hand, we also need to recognise the significant time and potential cost associated with completing a doctoral program, which as a result are often completed on a part-time basis due to financial constraints. Considering this, reflections are also needed on establishing a robust academic pipeline that acknowledges pay disparities between academic and clinician salaries to enhance the attractiveness of an academic career that supports HDR candidature.

Our findings reveal that a significant number of respondents who are on a mixed teaching and research workload model were not currently research active. In their study of Australian nurse academics, Singh, Jackson, Munro, and Cross (2022) found significant occupational stressors, including incivility, inequitable workload distribution, and a lack of recognition or supportive workplace culture. Combined with poor work-life balance, insufficient mentoring, limited leadership skills, and inadequate political astuteness, these factors likely limit the capacity of this group to develop and sustain research activities (Singh et al., 2022). This also highlights the importance of capacity building within Doctoral programs and post-doctoral mentoring to ensure that people are supported to develop meaningful and productive careers (Hafsteinsdottir, Schoonhoven, Hamers, & Schuurmans, 2020; van Dongen, Hafsteinsdottir, Broome, Suhonen, & Leino-Kilpi, 2024).

To enable more nurse and midwifery academics to become active and productive researchers, several strategies can be used. Schools of nursing and midwifery can help support improvements in research activity through a range of strategies, including adopting inclusive leadership models and supportive interventions such as effective mentoring, and strategies to improve and enhance workplace culture and work-life balance (Cross et al., 2019; Grant, Robinson, & Laver, 2022; Heaton-Shrestha et al., 2023; Singh et al., 2022). All academic nurses and midwife academics should be encouraged to develop a personal research activity plan with achievable short- and longer-term goals. Managers and leaders can then initiate the support necessary to enable achievement of their goals. At the institutional level, workload models that support research development and career trajectory, rather than being solely output-focused, are needed to support research productivity and outcomes. Whilst research governing bodies have begun recognising career stages, considering the limited success of national grant applications, further work is needed to support new researchers, particularly within the nursing and midwifery profession. Strategies such as these are essential to support research engagement and workforce sustainability in nursing and midwifery academia. There is a considerable body of literature highlighting that nurses and midwives new to academia require significant support and mentoring to successfully take on all the elements of their new roles (Jackson et al., 2015; McDermid, Mannix, Jackson, Daly, & Peters, 2018; Singh et al., 2022). Furthermore, findings of this current study also suggest that people in less secure employment may be disadvantaged in relation to establishing a productive research career. Therefore, we argue that it is important to advocate for supportive workload models, greater recognition of nursing and midwifery research at the national level, employment security, and to actively reduce the number of nurse and midwifery academics in short term and precarious employment.

6. Limitations

Several limitations should be acknowledged. The data were self-reported and may have introduced response bias, with participants potentially overestimating or underestimating their research activity. Furthermore, self-reported data may have also introduced recall bias, where participants may not have accurately reported their past research activities, which may impact the overall reliability of the findings. While the cross-sectional design provides a snapshot of research activity, it does not reflect changes over time or causal relationships. The recruitment methods, which included social media and professional networks, may have led to sampling bias, as those more engaged with academic and professional organisations may have been more likely to be aware of and participate in the study. Furthermore, as participants were largely registered nurses and dually registered nurses and midwives, further research is needed to explore the research activity of the academic midwifery workforce.

7. Conclusion

This study highlights the complexities and disparities in research activity within the Australian nursing and midwifery academic workforce, and underscores the significant influence of qualifications, tenure, and workload allowances on research engagement and productivity. By fostering enabling environments that support research activity across all academic roles, universities can enhance the contribution of nursing and midwifery academics to evidence-

based practice and education in addition to the broader research agenda. Future research should explore longitudinal trends in research activity and investigate strategies to overcome barriers faced by academics in short-term and precarious roles who do not have the same levels of job security as tenured academics.

Authorship contribution statement

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

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Ethical statement

This study was approved by the University of New England's Human Research Ethics Committee (HE22-128) in August 2022.

Conflict of interest

We, the authors, have no conflicts of interest to declare.

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