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Lee, Megan; Coutts, Rosanne; Fielden, Jann; Hutchinson, Marie; Lakeman, Richard; Mathisen, Bernice; Nasrawi, Dima; Phillips, Nichole

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## **Occupational Stress in University Academics in Australasia**

## **Abstract**

Occupational stress has increased in higher education academic staff over several decades, and this has been particularly acute in Australasia. This scoping review sought to understand the causes and impacts of occupational stress among Australasian academics. Eight EBSCO databases were searched for key terms: academic and occupational stress and Australasia. Twenty relevant papers were sourced, from which five common themes were extracted: (i) balancing an academic workload, (ii) casualisation of the workforce, (iii) the managerialism phenomenon, (iv) transition from field of practice to academia, and (v) academic and other staff. Further research in the Australasian context is required to identify the nature of specific stressors and how these impact health and well-being.

**Keywords:** occupational stress; Australasia; higher education, academics

## Occupational Stress in University Academics in Australasia

Occupational stress is increasing among Australasian university academic staff (Crome et al., 2019; Tham & Holland, 2018). This concept is defined as an individual's perception of any discrepancy or deficit between the demands or stressors placed upon them in their occupation and their capacity to meet these demands (Topper, 2007). A large scale international comparative survey of academics found Australian academics experience the second-lowest work satisfaction globally and the third-worst evaluation of managerial staff (Coates et al., 2010). Commonly, both experienced and early-career academics report high occupational stress (Crome et al., 2019; Singh et al., 2020). Young female academics also report particularly high levels of stress (Singh et al., 2020; Watts & Robertson, 2011). Staff who transition from industry to academia have also been shown to experience particular stressors associated with changes in cultural identity and organisational priorities, along with tensions around learning how to teach, and establishing a research career (Logan et al., 2016).

There are multiple sources of occupational stress in the university setting. The Job Demand-Control model indicates that staff who experience the lowest occupational well-being are often in roles with the highest demand, low control and support, and isolation (Van Der Doef & Maes, 1999). Other factors that contribute to occupational stress in the university setting include a culture of escalating managerialism (Shin & Jung, 2014), unrealistic workloads along with reduced staffing, lack of or loss of decision-making power, working excessive hours, low status in the academic hierarchy, poor financial remuneration (Winefield et al., 2008), and decreased level of work-life balance as job stress and workloads increase (Bell et al., 2012).

Occupational stress can also result from an organisational climate where student numbers rapidly escalate (Watts & Robertson, 2011), putting pressure on limited funding and resources (Gillespie et al., 2001). Effort-reward balance (van Vegchel et al., 2005) is also essential, such that no reward or recognition or inequity of reward systems following high levels of effort, is a frequently cited source of occupational stress in both academic and general university staff (Kinman, 2019), significantly decreasing engagement and increasing the risk of adverse physical and mental health (Mark et al., 2012). Other environmental factors that can cause occupational stress include decreased job security and increased casualisation of the workforce (Barrett, 2004; Halcomb et al., 2010).

The occupational stress factors mentioned above have inevitable impacts on university staff, including resignations, frequent staff turnover, absenteeism, low mood, headaches, anxiety, depression, insomnia and eating disorders (Dua, 1994; Gillespie et al., 2001; Sharpley et al., 1996). Staff also report noteworthy work-life conflicts that reduce life quality, impact personal and family relationships, and intrude into non-work activities (Gillespie et al., 2001). Quality of teaching and research can also be affected by the accumulation of occupational stressors, and academic staff can feel burdened by managing their well-being, while also providing pastoral care to ever-increasing numbers of students (Tham & Holland, 2018).

Australasian universities have a duty of care to the academic workforce and a need to support their mental health and well-being. Understanding the causes and impacts of occupational stress could assist in facilitating measures to decrease the risk of burnout and staff attrition, as well as support staff who wish to remain in their academic careers long-term (Tham & Holland, 2018). While some systematic reviews examine the associations between occupational stress in academic staff internationally (Sabagh et al., 2018; Singh et al., 2020; Watts & Robertson, 2011), these focus either on burnout alone or are not related to the Australasian context. Therefore, this scoping review aims to better understand the causes and

impacts of occupational stress in Australasian academic university staff.

## Methods

A scoping review was carried out using the Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA) extension for scoping reviews (Tricco et al., 2018). Scoping reviews help synthesise research evidence, uncover gaps, provide evidence-based recommendations in policy and practice, and assess the scope of literature published on a specific topic. A scoping review is also a helpful tool in determining whether a systematic review of the topic is required (Levac et al., 2010). A scoping review framework set out by Arksey and O'Malley (2005) was used to answer the research question "What are the impacts of occupational stress in academic university staff in Australasia?"

### Search Strategy

A systematic literature search was conducted using eight EBSCO databases: Academic Search Premier, CINAHL, Education Research Complete, ERIC, APA Psych Articles, Psychology and Behavioural Sciences Collection, PsychINFO and MEDLINE. The databases were chosen as they reflect a range of articles across both health, psychology and education.

The full text of articles was searched from January 2000 to September 2020 including key terms "university teach\*" OR "university staff" OR academic\* AND "occupational stress" OR "work\* stress" OR "job stress" AND Australia\* OR "New Zealand" OR Australasia. The search was limited to abstract and peer-reviewed articles. Grey and secondary sources were excluded. Citation chaining and manual reference list searches were conducted to identify further articles.

Relevant articles were screened by title and abstract by two independent reviewers (ML & BM). The following inclusion criteria were applied: studies that were primary research, qualitative, quantitative or mixed methods, contained populations of academic staff, included measures of occupational or work stress and were scholarly articles. Articles were excluded if they included only non-academic university staff, school teachers, interns or students. The full text of all articles that met these criteria were included in the final review.

The initial search terms included 93 articles, with eleven further articles found through citation chaining and reference list searches. Duplicates ( $n = 38$ ) were removed, which left 61 articles to be screened by title and abstract. The full text of 26 articles were assessed for eligibility, six were excluded due to either not being within the Australasian context or not addressing the outcome of occupational stress. This left 20 articles which were included in the scoping review analysis. See PRISMA flow diagram Figure 1. Data was extracted from the articles including author and year, research aim, research design, sample size and academic role, outcome measurement and findings (see Supplementary Table). After which, the main findings with regard to academic occupational stress was organized thematically according to outcomes and contributing factors. These outcomes became the primary focus of analysis and the findings are reported around these themes.

## Results

As a whole, the 20 studies were representative of 51,098 academic and non-academic

staff employed in universities across Australia and New Zealand between 1994 and 2019. The majority of studies were quantitative cross-sectional surveys. Of these studies, seven employed specific measures of stress or psychological distress (Bell et al., 2012; Gillespie et al., 2001; Langford, 2010; Shin & Jung, 2014; Winefield et al., 2008; Winefield et al., 2003; Winefield & Jarrett, 2001) and one employed a measure of burnout (Raskauskas & Skrabec, 2011). An imbalance between work demands and the capacity to meet these demands were investigated through items measuring aspects of family/work conflict or balance (Bell et al., 2012; Fredman & Doughney, 2012) or features of the work environment, job resources or work control (Fredman & Doughney, 2012; Houston et al., 2006; Winefield et al., 2003; Winter & Sarros, 2002; Winter et al., 2000).

The results which represent the main sources of occupational stress explored were categorised under the following themes: (i) balancing an academic workload, (ii) casualisation of the workforce, (iii) the managerialism phenomenon, (iv) the transition from field of practice to academia, and (v) academic and other staff (see Table 1).

### **Theme One: Balancing an Academic Workload**

Ten studies reported associations between occupational stress and combined research and teaching roles (Bell et al., 2012; Boyd et al., 2011; Gillespie et al., 2001; Houston et al., 2006; Munro et al., 2019; Shin & Jung, 2014; Tham & Holland, 2018; Winefield et al., 2003; Winefield & Jarrett, 2001; Winter & Sarros, 2002). Of these studies, three reported significant associations between teaching/research roles and poorer job satisfaction and increased psychological distress (Shin & Jung, 2014; Winefield et al., 2003; Winefield & Jarrett, 2001).

The major antecedents of research-role related occupational stress were: competing workload obligations (Gillespie et al., 2001; Houston et al., 2006; Tham & Holland, 2018), organisational demands and funding vagaries (Gillespie et al., 2001; Houston et al., 2006; Munro et al., 2019; Winefield et al., 2003) and, work intensification, role overload and work-life conflicts (Bell et al., 2012; Winter & Sarros, 2002).

Academics faced considerable challenges in balancing the demands of teaching and research workloads. In two studies, academics reported pressure to produce research outputs, whilst also fulfilling increasing teaching obligations (Anderson, 2006; Gillespie et al., 2001) in an environment of limited research funding and competing teaching pressures (Anderson, 2006). Research expectations and demands were reported to have increased, while the time available had decreased (Tham & Holland, 2018). The research was often undertaken after teaching, and other obligations were met, leaving little, if any time in the normal workday for research activities (Houston et al., 2006).

Qualitative data detailed how work intensification placed pressure on the ability of individuals to deliver research outputs. Attempts to juggle these competing pressures resulted in younger academics working longer hours and weekends to establish a research profile, or using annual leave as a time to progress their research (Anderson, 2006). Across several studies, academics reported being held to account by supervisors for not producing sufficient research outputs in the face of increasing teaching demands. The demands of meeting research performance targets were reported as spilling over into academics' personal lives, impacting negatively on work-life balance, the capacity to have a family, and creating significant work-life conflict (Anderson, 2006; Bell et al., 2012).

Research-active academics were reported to be particularly vulnerable to the vagaries of funding environments and performance-based management impacts on stress and job satisfaction. Funding pressures across universities resulted in higher degrees of difficulty in

securing research funds, greater teaching load, and a decrease in teaching and research support and facilities (Winefield & Jarrett, 2001). Munro et al. (2019) highlighted expectations from universities that early-career academics would engage in research, without formal support or mentoring. Others reported feeling pressured to be entrepreneurial in sourcing research funding (Gillespie et al., 2001) or feeling pressured to attract external research funding (Houston 2001).

### **Theme Two: Casualisation of the Workforce**

Five studies reported occupational stress differences between casual and tenured academic staff (Barrett, 2004; Crome et al., 2019; Fredman & Doughney, 2012; Gillespie et al., 2001; Houston et al., 2006). An increase in academic teaching casualisation has been a key strategy to reduce costs in Australian universities (Barrett, 2004). Casual academic staff are defined as “staff involved in teaching who do not hold a tenured position at a university and are paid only on actual hours worked” (Halcomb et al., 2010, p. 2). The Australian university sector's marketisation has decreased job security for academic staff, leaving 86.5% of academic (Houston et al., 2006) staff in Australia with casual contracts and 7.2% with limited-term contracts (National Tertiary Education Union, 2020). This change has created academic workplaces which are populated largely by ‘career casuals’ who are highly educated and skilled and replace academics who once held tenured positions (Barrett, 2004).

In a large-scale academic staff survey, insecure tenure was noted as one of the major stressors for Australian academics (Langford, 2010). The casualisation of the university sector has created a most substantial effect on early-career academics and researchers; defined as those who are within five years post PhD completion (Bosanquet et al., 2017). The impact of lack of tenure was investigated in a survey of 151 early-career academics in Australia ( $M$  age = 37.6 years) (Crome et al., 2019). Many early-career academics and researchers found themselves in a position of minimal job security, and this lack of job security was linked to increased stress and lack of satisfaction in the work environment (Crome et al., 2019). Crome et al. (2019) reported that although early-career academics are the future of Australia's sector, lack of job security, competition, and uncertainty regarding future career were all drivers of burnout disengagement and adverse mental health in this promising cohort. The increased casualisation of early-career academics is suggested to be “creating a talent drain as gifted researchers leave academia” (Crome et al., 2019, p. 717) and could result in diminishing diversity and quality of research.

Similarly, Barrett (2004) suggests that increased casualisation increases the ‘emotional labour’ involved in teaching. This is described as increasing stress and burnout. They also acknowledge that any additional ‘emotional labour’, stress and burnout are rarely recognised by management and lead to a lack of reward and recognition for contributions made and increases in the potential for casual staff to leave the university due to dissatisfaction. As the attraction of an academic career is usually due to autonomy and extrinsic influences rather than the salary (Houston et al., 2006), collegial relationships and being part of a team (Crome et al., 2019), it is important to consider these factors to increase engagement and decrease attrition of academic staff.

### **Theme Three: The Managerialism Phenomenon**

Seven studies reported associations between managerialism and occupational stress (Anderson, 2006; Fredman & Doughney, 2012; Langford, 2010; Shin & Jung, 2014; Tham & Holland, 2018; Winefield et al., 2003; Winter & Sarros, 2002). Managerialism is defined as an ideological belief in management's power and tight control within an organisation (Diefenbach, 2014). “Managerialism combines management’s generic tools and knowledge with an ideology to establish itself systemically in organisations, public institutions, and society while depriving

business owners (property), workers (organizational-economic) and civil society (social-political) of all decision-making powers” (Klikauer, 2013, p. 1105).

Shin and Jung (2014) compared surveys of academic staff across the education systems in 19 countries on job satisfaction, job stress, perception of scholarship, workload, work environment, governance, and management. Their results showed that universities with high stress demonstrated a higher performance-based management style, with expectations of high academic productivity (as measured by peer-reviewed published articles), in universities with high academic autonomy, academic staff report higher job satisfaction which was suggested as moderating the high-stress factor. In countries with low job satisfaction and high job stress (Australia, United Kingdom, Germany, Hong Kong and China), Shin and Jung (2014) reported that managerial reforms had been most vigorously imposed and universities had become ‘performance managed’, with external stakeholders becoming involved in university governance. Shin and Jung (2014) and Fredman and Doughney (2012) conclude that market-orientated reforms contribute to staff occupational stress.

Managerialism in the educational sector has led to changes that have been well chronicled in Australia. Academic staff have reported that managerialism has led to demoralisation and particular features, such as a lack of opportunity to influence decision-making, low levels of genuinely considered feedback, conflict with management and work overload contributing to a poor quality of working life (Winter & Sarros, 2002; Winter et al., 2000). In a large-scale survey of Australia academic staff, Langford (2010) noted that work overload, perceived poor leadership, lack of funding, limited resources, lack of reward or recognition, and insecure tenure were identified stressors. Anderson (2006) noted that managerialism's implementation led to resistance from academics and reduced productivity in terms of research output and burnout in the early years. Relationships between management and the academic workforce remain pivotal sources of stress. Tham and Holland (2018), for example, noted that increased intensification of work, job security and dissonance between senior management and the academic workforce are stressors for those who work specifically in business schools in Australasia.

The stressors and their impacts appear to have worsened over time. Winefield et al. (2003) found that 43% of Australian academic staff sampled scored three or above on the General Health Questionnaire which is suggestive of possible cases of psychological illness. These authors noted that levels of distress had worsened over the preceding five years. They theorised that high-stress jobs have high demands with low control or autonomy and suggest that recent organisational change in the sector had meant that control had shifted from academics to university senior managers whilst pressures had increased through decreased funding and increased demands for accountability. Every aspect of an academic's work, they argued, was subject to scrutiny which contributed to stress including carefully scrutinised student evaluations of teaching, higher degree by research outcomes, publications, citations as well as new demands to attract external funding for research.

#### **Theme Four: Transition from Field of Practice to Academia**

Three studies across Australasia have variously explored this transition from the field of practice to academia in paramedics (Munro et al., 2019), occupational therapists (Murray et al., 2014) and staff from business (Tham & Holland, 2018). Any role transition can be psychologically stressful, requiring a heavy time commitment. Navigating the transition from the field of practice to academia requires staff to take on an academic identity (Munro et al., 2019; Murray et al., 2014; Tham & Holland, 2018) and manage multiple roles as researchers, teachers



and in the provision of service. While considered expert in their field of practice, some new academics may be yet to commence or complete a higher research degree such as a PhD or professional doctorate (Munro et al., 2019; Murray et al., 2014).

A grounded theory study investigating occupational therapists' perspectives ( $n = 16$ ) of the complex social processes required to transition into academia was conducted in eleven Australian universities (Murray et al., 2014). Participants experienced stress in the form of 'culture shock' both, as they realised that they needed to do research as well as teach and due to a differing (looser, less structured) culture in academia compared with clinical practice. Researchers posited a theory that occupational therapy academics undergo a process of 'weighing up' (p. 440) the commitment to academia and questioning whether it is 'a good fit' (p. 443) for them. This exemplifies the need for new academics transitioning into academia from practice to be given time to learn new skills and become enculturated into the world of academia which is a process described by Murray et al. (2014) as one of simultaneously "letting go" and learning new ways of thinking and being to embrace a new culture.

Munro et al. (2019) interviewed 16 paramedic academics from Australia and New Zealand. Paramedics transitioning from clinical practice into academia reported stresses related to lack of support and role uncertainty, lack of acceptance by their clinical peers and a lack of constructed academic identity. They identified that the pressure of balancing teaching, research, and publishing led to significant stress and feelings of inadequacy and a desire to pursue a non-academic career pathway.

#### **Theme Five: Academic and Other Professional Staff**

Seven studies reported on the differences between occupational stress experienced by academics versus professional university staff (Bell et al., 2012; Boyd, 2014; Gillespie et al., 2001; Langford, 2010; Samad et al., 2015; Tham & Holland, 2018; Winefield et al., 2008). Although much of the focus on occupational stress in tertiary education concerns academics, it is also useful to consider professional university staff's experiences. Additionally, benchmarking academic workloads and workplace well-being against other industries is an informative exercise. However, comparisons of workload between different roles are inherently complex (Boyd, 2014).

The relationship between occupational stress and ill-being is not as clear in academics as is it in the general population (Bell et al., 2012), or other organisations outside of higher education (Langford, 2010). There is an interesting paradoxical relationship where academics report higher stress levels (Gillespie et al., 2001), significantly higher work-hours and work-life conflict, and lower work-based social support than general staff. Curiously, in one study, the experience of strain was found to be the same in both groups (Samad et al., 2015); however, Winefield et al. (2008) found that academics experienced greater psychological strain. Academics were also more likely to work in the evenings and weekends, but were more satisfied with taking work home than general staff (Samad et al., 2015). Moreover, Langford (2010) ( $n = 26,226$ ), found that while academics scored worse in 17 of 31 workplace practice and outcome measures than in other industries, they also gave higher scores for job satisfaction, belief in mission and values, role clarity, employee engagement, and confidence and relationships with co-workers, than employees of other organisations.

Another similarity between academic staff and professional university staff is that, while general staff report lower stress and workloads overall, and have different roles and responsibilities, they do report similar sources of occupational stress and both groups appear to be experiencing an upward trend of reduced workplace well-being (Gillespie et al., 2001; Tham

& Holland, 2018; Winefield et al., 2008). For example, Gillespie et al. (2001) describe a change in stress patterns from previously fluctuating periods of acute stress to more regular, ongoing high-stress periods, which is perceived to increase the risk of ill-being. In summary, although the current literature shows that academics are generally exposed to higher occupational stress levels and workloads than professional staff or staff in other industries, academics also appear to value their work and careers more. Therefore, research into this topic finds mixed and complex evidence for the usually clear relationship between occupational stress and lower well-being.

### **Discussion**

This scoping review has uncovered escalations in chronic occupational stress in the Australian higher education sector, highlighting impacts upon career aspirations and general well-being. Additionally, it has revealed implications where occupational stress outcomes are front and centre in relation to role clarity and balancing an achievable working life. Being chronically stressed can have an adverse effect on health (O'Connor et al., 2021). Whilst this review reveals that chronic occupational stress is present in the higher education sector, little is yet known about the long-term impact upon health and the nature and influence of several identified stressors.

Several reasons are posited for the trend of increased stressed amongst academic staff. Universities need academics who can produce a steady stream of peer-reviewed publications to improve their rankings as scholarly institutions attracting high-quality academic staff and enrol more students in a fiercely competitive higher education environment (Kinman, 2019). Academics who choose a research-active career path are particularly vulnerable to high levels of sustained stress and encouraged to overwork with little to no work-life balance (Munro et al., 2019). As a direct result, more and more early-career academics opt to take “teaching only” positions with little to no research capacity-building or development expectation, despite supervisors stating otherwise (Crome et al., 2019).

As the Government share of university funding has reduced and teaching workloads have been increased, ongoing research-active academic staff are expected to shoulder the work of managing a contractual teaching workforce as well as increasing teaching and administration (Murray et al., 2014). There is little appetite among universities to employ additional staff to take some of the burden created by online lecture preparation, tutorials and marking so that these staff can remain productive in terms of their research goals. It is not uncommon (particularly amongst female academics) that a research career remains stalled at lecturer level due to shrinking capacity to engage in research and little, if any, mentoring or support by more senior colleagues (Anderson, 2006).

A further rationale for escalating occupational stress levels described by the scoping review is the well-documented and increasing casualisation of the academic workforce. Individuals who remain insecurely employed with little recognition or reward for their commitment to the university are seen as expendable and even open to abuse in terms of inadequate remuneration for their emotional labour (Crome et al., 2019). Academic tasks such as arranging and running resubmissions and resits by failing students may occur outside of “teaching periods” or additional administrative activities such as amending course guides and assessment information for future iterations are routinely requested outside of contracted hours (Fredman & Doughney, 2012). Affected staff have little power to refuse in the current climate.

Managerialism or ‘audit culture’ in the health sector pre-dated the university sector's infiltration by this pervasive ideology, and indeed it roughly coincided with some large occupational groups such as nursing shifting their undergraduate education to the University

sector. It is not surprising that some commentators have been deeply critical of the impact in both sectors (Darbyshire, 2008; Lakeman & Molloy, 2018).

Despite the occasional polemic on the neoliberal university and how it has been transformed into large corporate entities, (Sims, 2020) there has been little resistance from academics. Whelan et al. (2013) liken the process to zombification, whereby resistance, as described by Langford (2010), is not only stressful, but it is ultimately futile. Managerialism is self-justifying, self-sustaining and is not only the new reality, but it has been the only reality experienced by academics in some countries for over 25 years. Deductively driven analysis (now looking somewhat dated) confirms that managerialism contributes to stress via multiple pathways. However, by and large inductively generated research related to nurse academics has focused on more prosaic issues such as workloads, work-life balance, lack of resources, support and dealing with change (Singh et al., 2020).

The Australian Government introduced graduate surveys in 2017 purported to lead to ‘transparency in higher education’ (qilt.edu.au) whereby prospective students can compare Quality Indicators for Learning and Teaching (QILT), including student experience, graduate employment, graduate satisfaction and employer satisfaction. All higher education providers compete to be above the average on all of these measures. In recent years (and since most reviews have been published) it has become a near-ubiquitous experience for the QILT experience by way of anonymous surveys to be completed for every unit and course, and for every member of teaching staff to be evaluated via this method. The impact of this on staff well-being and genuine measures of quality is lacking within higher education research. The anonymity given to students is often a license to express whatever sense of grievance they may have through sometimes defamatory feedback and poor evaluations that may impact academic staff’s tenure and promotion. It is no surprise that happy students tend to pass and any real or imagined threat to a student passing may well lead to poor evaluations, thus impacting academic standards that are widely perceived to be greatly compromised by managerial preoccupations (Darbyshire et al., 2019).

Another reason for the rise in occupational stress amongst university academics is the commonly fraught transition from a highly skilled and high-status field worker to a junior-level academic who lacks adequate support and mentoring, finding themselves dealing with culture shock on entering university life (Tham & Holland, 2018). Not only is this not anticipated by the individuals concerned, initially attracted by the allure of a research career but frequently the stimulus for these individuals to return to a “life outside” academe which is seen to be a better fit for them (Murray et al., 2014).

Finally, this review reported that general staff are less affected by increasing occupational stress than their academic colleagues. This finding may be partly because academics are largely intrinsically motivated so that working after hours is more tolerable for the intellectual stimulation it delivers (Samad et al., 2015).

The significance of these varying strands in the evidence supporting increasing occupational stress in university academics lies with a possible dereliction of the duty of care by managers and supervisors to their staff, particularly in the case of early-career academics (Houston et al., 2006). All universities espouse core values of collegiality, being open and respectful in dealings with students and each other, collaboration and trust, integrity, honest and ethical behaviour and accountability.

## **Recommendations**

This scoping review evidences the inconsistent measurement of occupational stress among Australia and New Zealand academics. When measured, a variety of scales and interpretations were employed, making comparisons difficult. Burnout was inferred but not measured (Bell et al., 2012) or examined in a specific sub-set of academics, for example, those reporting workplace bullying (Raskauskas & Skrabec, 2011). In most studies reviewed, stress was inferred through an imbalance in work demands, work intensity, work control and available resources. The majority of the included studies employed correlational relationships using cross-sectional designs or were qualitative studies, limiting causal inferences. Study designs, such as longitudinal approaches and consistent measurement, would allow for causal inference and in-depth analysis of stress and its antecedents in the academic workforce. Further research applying a more robust study design is required.

Few interventions appear to have been implemented to mitigate stress, burnout, or work disengagement in the Australian and New Zealand academic workforce. A multi-pronged approach is recommended to improve the mental well-being of academic staff. Establishing regular mental health assessment, effective communication and work practices (Ohadomere & Ogamba, 2020) and improving existing support is a priority. Other authors have evaluated stress-reduction interventions aimed at individuals to enhance wellbeing and morale (Pignata et al., 2017; Pignata et al., 2018; Pignata et al., 2016a, 2016b). However, based on the findings of this review, with the move to managerialism in the university sector, it is essential that management prioritise systems based organisational strategies to promote health and wellbeing, minimise stress, thus providing a safer workplace. Leadership (supervisors, managers, Deans) need to acknowledge their significant duty of care to their academic staff, ensuring that students treat academics respectfully (particularly when providing unit/course feedback) and reduce occupational stress levels for female and early-career academics. Any improvement of work-life balance and the reduction of stress and burnout could improve academic well-being and, ultimately, educational and research outputs across the sector.

### **Conclusion**

Workplace stress is recognised to contribute to a wide range of unfavourable individual and organisational outcomes. A striking feature of this review is the limited examination of stress among academics in the Australasian context, and the absence of high-quality comparable evidence. The level of evidence is largely descriptive, limiting evidence-based recommendations for improvement. In addition to foregrounding the need to re-assess how stress is investigated in this setting, the authors identify several areas for further investigation.

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