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Title of Chapter: Wellbeing in academic employees– a benchmarking approach

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Abstract

Research from several countries indicates that university lecturers and researchers are particularly vulnerable to work-related stress from various sources. This chapter draws on the findings of research conducted by the authors in the United Kingdom (UK) over several years to highlight the value of a benchmarking approach in monitoring the wellbeing of academic employees. The literature on the stressors and strains experienced by academics is initially reviewed. The findings of three studies using a well-established framework to assess psychosocial hazards in the university sector in the UK are then presented and discussed. Except for job control, respondents reported lower wellbeing for each of the seven specified hazards than recommended, with evidence of deterioration over time in some areas. The implications of these findings and the value of supplementing the benchmarking approach with hazards reflecting the current working context are discussed. Priority areas for interventions to enhance wellbeing among academic employees are identified and topics for future research proposed.

Key words: academics; faculty; benchmarks; wellbeing; change

Work-related stress in academic employees

The university sector worldwide has experienced intense and wide-ranging change and there is evidence that the work has become increasingly stressful. This means that the wellbeing of university staff has become of considerable interest to all stakeholders. Over the past ten years or so, studies conducted in countries such as Canada (Biron et al., 2008), the United States (Reevy & Deason, 2014); Australia (Winefield et al., 2008); South Africa (Barkhuizen & Rothmann, 2008), Malaysia (Idris et al., 2011); China (Zhang et al., 2013); Oman (Shrivastava & Shukla, 2015); India (Reddy & Poornima, 2012); the Netherlands (Taris et al., 2001); the Czech Republic (Zabrodska et al., 2017); Ireland (Byrne et al., 2013) and the United Kingdom (UK) (Kinman & Wray, 2014; Tytherleigh et al., 2005) have investigated the stressors and strains experienced by university employees. There is evidence that academic staff (those with teaching and/or research contracts) are particularly vulnerable to work-related stress, burnout and mental health problems (Guthrie et al., 2017; Kinman & Wray, 2014; Winefield et al., 2008). A systemic review conducted by Watts and Robertson (2011) concluded that academics have a similar risk of burnout (particularly emotional exhaustion) to 'highly pressured' employees such as healthcare workers. Moreover, 27 per cent of a large sample of academics working in universities across North America reported experiencing emotional exhaustion either often or very often, which is higher than the proportion found in many other working populations (Padilla & Thompson, 2015). Pressure from teaching, service activities and applying for research funding were found to be the most powerful predictors of emotional exhaustion.

Our own research using the General Health Questionnaire (GHQ-12: Goldberg & Williams, 1988) indicated that academics in the UK are at considerable risk of psychological distress and the prevalence may be increasing. This measure assesses common mental health problems, such as depression and anxiety, as well as associated symptoms such as cognitive disturbance and sleeping difficulties. In 2004, 50 per cent of our sample of almost

10000 academic employees met the threshold criteria for 'caseness' (or a clinical level of mental health symptoms) (Kinman et al., 2006). Follow-up research conducted ten years later, however, found that the caseness rate among almost 5000 academics had risen to 62 per cent (Kinman & Wray, 2014). This is considerably higher than many other occupational samples that have used the same measure (Goodwin et al., 2013; Stride et al., 2007).

A review of the literature highlights the wide range of stressors experienced by academic employees. There is evidence that demands, such as long working hours, work overload, fast working pace, heavy administrative burden, complying with quality assurance procedures and pressure to obtain research funding and to publish, are considered particularly stressful (Barkhuizen & Rothmann, 2008; Coulthard & Keller, 2016; Gillespie et al., 2010; Guthrie et al., 2017; Taris et al., 2001; Torp et al., 2016). Other studies have also identified a lack of professional resources, such as low autonomy and independence, insufficient support from managers and colleagues, poor leadership and management, limited career development opportunities, communication difficulties, lack of involvement in decision-making and low job security, as particularly problematic (Edwards et al., 2009; Gillespie et al., 2001; Jerejian et al., 2013; Kinman, 2014; Torp et al., 2016; Tytherleigh et al., 2007; Winefield et al., 2010).

The importance of a supportive, collegial culture to the wellbeing of academic employees has been highlighted, with poor working relationships and conflict identified as key sources of stress (Kinman & Wray, 2014; Narayanan et al., 1999; Tytherleigh et al., 2007). Lack of reward and recognition for one's efforts appears to be particularly harmful for academic staff (Gmelch et al., 1984; Mark & Smith, 2012). A series of studies testing the effort-reward imbalance model (Siegrist, 1996) with staff working in UK universities (Kinman & Jones, 2008a,b; Kinman, 2016a) found that respect and esteem rewards were robust predictors of mental health, job satisfaction, work-life balance and retention. Evidence was also found that such rewards can also offset the negative impact of job-related efforts.

Several studies have identified role stressors, such as overload and conflict, as a key hazard for academic staff. Although occupying multiple roles can benefit wellbeing (Barnett, 2004), meeting the demands and expectations of one role will deplete the resources available to meet the requirements of others. The negative effects of intra-role conflict (incompatible requirements within the same role) and inter-role conflict (pressures stemming from different domains, such as work and personal life) for wellbeing have been widely demonstrated (Katz & Kahn, 1978). Academic employees appear to be particularly vulnerable to intra-role conflict due to the increasing number of roles they are expected to fulfil (for example, teaching, research, mentoring and pastoral care, external consultancy and public engagement) (Biron et al., 2008; Gmelch et al., 1984; Kinman & Wray 2014). In terms of inter-role conflict, there is evidence that academics are at particularly high risk of conflict between their work and personal lives which is a powerful source of distress (Barkhuizen & Rothmann, 2008; Kinman & Jones, 2008c; Kinman & Wray, 2014). A combination of work-related, individual difference and behavioural factors have been found to contribute to work-life conflict among academic staff. Work overload coupled with a deep involvement in the job means that the boundary between work and personal life is often flexible and permeable increasing the risk of conflict and poor wellbeing (Kinman & Jones, 2010). Although the degree of work-life integration considered acceptable by academic staff varies, sufficient opportunities for recovery are essential to protect health and job performance (Kinman & Jones, 2008; Kinman, 2016a).

A benchmarking approach

The accurate diagnosis of psychosocial hazards is essential in developing interventions to reduce work-related stress at source. Approaches that allow researchers to compare their findings with benchmarks from appropriate samples can be particularly useful in interpreting findings, setting priorities and targeting change initiatives. A benchmarking approach has been used previously in universities in Australia and the UK. Langford (2010) compared responses from over 26 000 staff working in 17 Australian universities with

benchmarks from public sector organizations across a range of work practices and outcomes previously linked to high performance. Overall, universities scored more poorly than target groups in areas such as cross-unit cooperation, organizational processes and facilities, wellness and work-life balance, but they reported more role clarity and work engagement, a stronger belief in mission and values and more positive relationships with colleagues than other sectors.

Tytherleigh et al. (2005) used the ASSET screening tool to identify the key sources of stress perceived by staff in 14 universities in the UK. The normative dataset for the ASSET currently has around 100 000 responses from organizations across the public and private sectors (Robertson Cooper, 2018). Findings revealed higher levels of stress among university staff compared to other sectors in areas such as work relationships, control, resources and communication, and the quality of commitment from and to their organization, whereas their wellbeing relating to workload, work-life balance and physical health status was assessed at lower risk. Both these studies have yielded useful findings but, as data were obtained from a homogenous group of university staff, no firm conclusions can be reached about academic employees. Moreover, some of the findings differ markedly from other studies of the sector reviewed earlier in this chapter: for example, many studies have identified workload and work-life balance as powerful sources of stress for academic staff.

Our research used a well-validated, risk-assessment process to monitor the wellbeing of UK academic employees rather than a mixed group of university staff. The first wave of data collection in 2008 allowed us to track the wellbeing profile of academics over time at a sector level and compare our findings with benchmarks from the UK working population. The next section describes the approach taken, presents the three waves of data collection and discusses any changes emerging over time.

The Management Standard approach <a>

The Health and Safety Executive (HSE: the body responsible for policy and operational issues concerning occupational health and safety in the UK) has developed a comprehensive process to help manage the work-related wellbeing of staff. A risk-assessment approach is utilized, where stress is considered a major health and safety concern and stressors are measured and managed like any other potential workplace threat. This approach was developed, in part, in response to a growing awareness of the costs of ill-health resulting from workplace stress (HSE, 1999). The HSE framework is based on a set of standards of good management practice (known as benchmarks) that identify the extent to which employers comply with their duty of care to protect the wellbeing of their staff by preventing stress from occurring at source (Mackay et al., 2004). This approach reflects extensive evidence that primary, or organizational-led, interventions are more effective than secondary initiatives that aim to enhance the stress management skills of individual employees (Noblet & Nielsen, 2018).

Following consultation with stakeholders and an extensive review of the literature, several elements of work activity (known as psychosocial hazards) were chosen that: a) are considered relevant to most workers; and b) have strong evidence as the most critical predictors of employee wellbeing and organizational performance (Mackay et al., 2004). The hazards are:

- Demands: e.g. workload, pace of work and working hours;
- Control: e.g. autonomy over working methods, pacing and timing;
- Peer Support: e.g. assistance and respect from colleagues;
- Management Support: e.g. the availability of feedback and encouragement;
- Relationships: e.g. interpersonal conflict, including bullying and harassment;
- Role: e.g. role clarity and how work done fits into the aims of the department and the organization;
- Change: e.g. how organizational changes are managed and communicated.

A self-report questionnaire has been developed to measure the seven hazard categories (the Management Standards Indicator Tool: MSIT; Cousins et al., 2004). The 35 items in the measure are scored using scales indicating the extent of agreement or frequency, with higher scores representing more wellbeing in each domain. There is growing evidence for the validity and reliability of the tool (Brookes et al., 2013; Edwards & Webster, 2012) and it is strongly correlated with scores on validated measures of job-related mental health and satisfaction (Kerr et al., 2009). Alongside the development of the MSIT, specific 'states to be achieved' (or benchmarks) were identified reflecting the strength of evidence linking exposure to each hazard to mental and physical health problems (Mackay et al., 2004). A large body of normative data from organisations within the public and private sector was used to develop the benchmarks. This approach has been used in a variety of occupational groups, such as police, prison officers and healthcare staff, to identify priority areas and target interventions (see Houdmont et al., 2012; Kerr et al., 2009; Kinman et al., 2016). The framework has also been incorporated into occupational health guidelines for several professional associations, including police and teaching, and in large public sector organizations such as the National Health Service.

Our findings <a>

We used the MSIT and other measures to obtain data from academic employees working in UK universities in 2008 (n = 7196), 2012 (n = 12635) and 2014 (5192). The sample characteristics for each wave of data collection are shown in Table 1. When using a benchmarking approach, it is crucial to identify the extent to which the sample represents the target population. Comparison with employment statistics for UK Universities (for example, HESA, 2014) indicates that the samples generally reflected sector norms in terms of age, but women were slightly over-represented and staff on temporary contracts were under-represented at each wave of data collection.

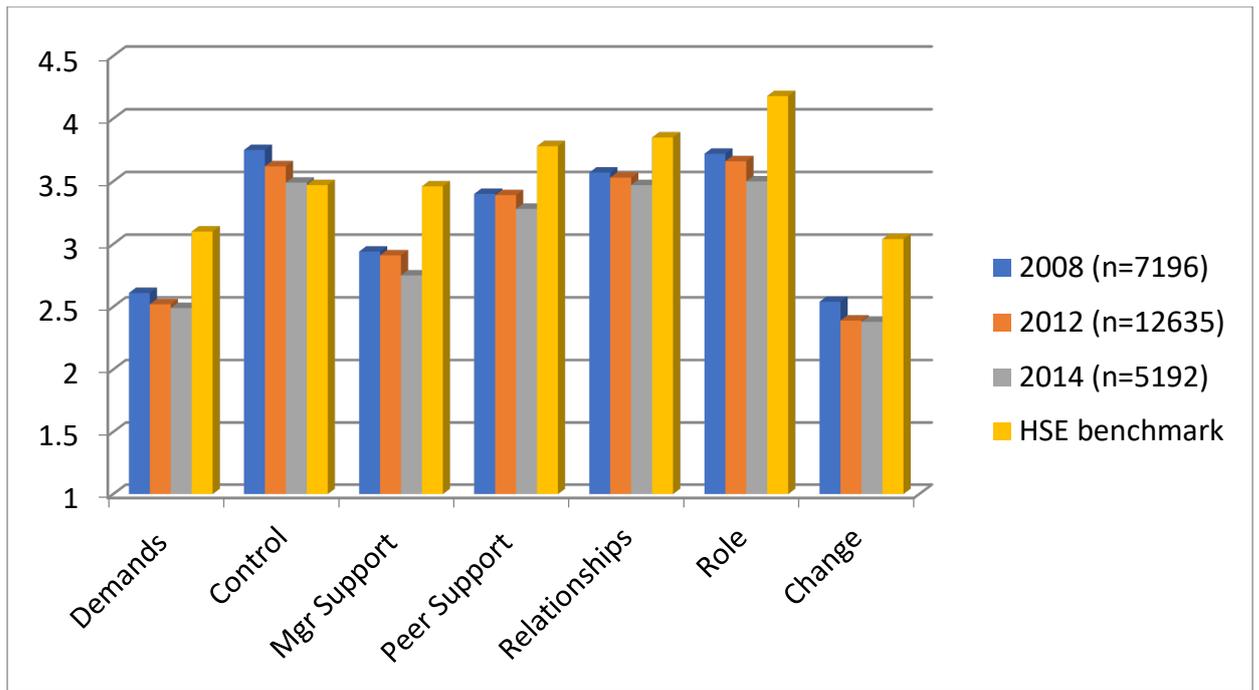
Table 1 Sample characteristics 2008 - 2014

	2008	2012	2014
Sample size	7,196	12,635	5,192
% Female	52.2	55	53
% Full time	82	84	83.5
% Permanent	85	88	85.2

Table 2 sets out the findings for each hazard dimension for the three waves, along with the recommended standards, or benchmarks. As mentioned above, higher scores represent greater satisfaction with each category. Apart for job control, which exceeded the recommended level, none of the benchmarks were met at any of the three data collection points. Scores for demand, relationships and change were particularly low compared to the reference group from other sectors in all waves. Analysis of variance identified significant reductions in mean scores for five out of the seven dimensions between 2008 and 2012 (Demands, Control, Relationships, Role and Change (all $p < .001$), indicating deteriorating wellbeing in these areas. Between, 2012 and 2014, wellbeing relating to Control, Relationships and Role reduced further (all $p < .001$) suggesting a continuing decline. Wellbeing relating to support from managers and peers also deteriorated between 2012 and 2014 (both $p < .001$). Mean scores for control also reduced but continued to meet the recommended standards. Although wellbeing relating to change deteriorated between 2008 and 2012, there was a slight improvement between 2012 and 2014 but this was non-significant.

Table 2: Mean scores for work-related hazards 2008 – 2014 with HSE benchmarks





Implications of findings <a>

The results of our multi-wave research have clear potential to help develop interventions to protect and enhance the wellbeing of academic staff. A fourth wave of data collection using the MSIT is in progress that will identify any further deterioration or improvements over time. Below, we interpret the findings in light of the rapid, wide-ranging changes to the nature of academic work occurring during the study period. We also highlight the value of extending the benchmarking approach to incorporate hazards that are more job-specific (Cox et al., 2009) and contemporary threats to wellbeing that might compound the negative effects of existing stressors.

The degree of satisfaction reported by academics with the level of demand they experience failed to meet recommended standards in 2008 and deteriorated further over the study period. Insight into employees' perceptions of demand relating to their workload, working hours and pace of work can undoubtedly help target broad-based interventions. The factors that might have contributed to the increased demand should also be considered, such as rapid expansion of student numbers with a more 'consumer-driven' approach to their studies, enhanced scrutiny of teaching and research, more pressure to undertake and

publish research, an increased focus on commercial activity, and a general need to 'do more with less' (Biron et al., 2008; Kinman, 2014; Nixon et al., 2018; Tytherleigh et al., 2005).

In terms of contemporary hazards to wellbeing, there is growing evidence that email has become a significant source of stress for university staff. Pignata et al. (2015) found that perceptions of overload were commonplace and underpinned by overuse of email by staff and students and expectations for a rapid response. The ability to access emails outside 'standard' working hours can also compound the negative impact of work overload among academics, especially where job involvement is high and boundaries between work and personal life are flexible and permeable (Kinman, 2016). The potential drawbacks of technology for the wellbeing of academic staff were also highlighted in a study of Icelandic academics (Heijstra & Rafnsdottir, 2010). Although participants believed that technology facilitated flexible working, they tended to work longer hours to comply with expectations of extended availability. The implications for academics' work-life balance and wellbeing via lack of recovery opportunities were highlighted in both studies.

The increasing role stress we observed in the sector also poses a considerable risk to the wellbeing of academic staff. The growing number of roles involved in academic work means that further insight into how they perceive their work tasks is crucial. There is increasing evidence that stressors linked to one's professional identity are particularly harmful (Semmer et al., 2007). If an individual believes their identity has been devalued, or that their work tasks are not well aligned with what they consider appropriate to their role, the risk of strain increases. Illegitimate tasks (those considered either unnecessary or inappropriate) are particularly damaging and have been associated with a range of negative outcomes such as burnout, job dissatisfaction and feelings of resentment towards the employer (Kottwitz et al. 2013; Semmer et al., 2015).

Our own research has found that academics believe they perform illegitimate tasks at work on a regular basis and this has increased the potential for intra-role stress (Kinman & Wray, 2014). Another recent study has provided some insight into the tasks that academics

find legitimate or unreasonable and how this might influence their wellbeing. Research conducted with 2127 Danish university staff found that long hours spent doing tasks considered intrinsic to the job (such as research) had weaker relationships with wellbeing than those considered illegitimate (such as administration) (Opstrup & Pihl-Thingvad, 2016). Nonetheless, as respondents were all researchers their expectations of what constitutes a legitimate task may have been narrower than those on a 'standard' academic contract that encompasses many other types of role. Reflecting the effort-reward imbalance model discussed above, the Danish study also observed that a lack of congruence between participants' expectations of academic freedom, peer recognition and job security and their actual working conditions increased the risk of stress. Further insight is needed into the tasks that academic employees consider congruent and incongruent with their professional role and how this influences their wellbeing, engagement and job performance. It is possible that junior academics are less inclined to see work tasks as illegitimate than their colleagues with longer tenure, who may be more likely to perceive role 'creep' and associated distress.

There is strong evidence that academic employees expect a high degree of autonomy over their working lives and lack of control can be a powerful source of strain (McClenahan et al., 2007). Although our research found that the overall level of control reported by participants exceeded the HSE minimum standards at all stages, it reduced significantly over time. It has been previously argued that a shift from a culture of consensual decision-making, co-operation and shared values towards a non-participative management style has eroded academics' sense of autonomy (see Fanghanel, 2011; Musselin, 2018). More generally, the importance of 'employee voice', defined as one's actual and perceived involvement in one's workplace, to their wellbeing has been highlighted (Wood, 2008). How to increase feelings of autonomy and involvement by academic staff should be a priority in the sector and this is considered further below.

A supportive and open organizational culture is crucial in promoting wellbeing, engagement and job performance. Like job control, positive working relationships and

mutual support can facilitate employee wellbeing by reducing strain at source and mitigating or moderating the impact of stressors such as high demand (Viswesvaran et al., 1999). Our research found that perceptions of support had reduced over time in UK universities and the quality of working relationships had deteriorated. The erosion of academic collegiality documented in the sector that was discussed above will inevitably affect the quality of working relationships. The increase in demand and role stress we observed over time is also likely to have constrained opportunities for academics to gain and offer support due to lack of time and energy. More seriously, several studies have documented an increase in bullying in universities which has been linked to growing workload pressures, role ambiguity, competitiveness and threats to professional status (Clark et al., 2013; McKay et al., 2008; Zabrodska et al., 2011). There is also evidence that bullying is likely to thrive under conditions of change and uncertainty (Weinberg et al., 2010), further highlighting the role of current working conditions in reducing satisfaction with working relationships.

Fundamental changes to the nature and organization of academic work have been discussed throughout this chapter and linked to employees' increasingly negative perceptions of their working conditions. Although change is essential for progress, it can be a potent stressor and impair health, job performance and retention (Weinberg et al., 2010). Changes introduced without adequate staff involvement can also threaten autonomy and professional identity and intensify role stress (Karp & Helgo, 2008). Although it is essential to anticipate and manage change effectively, we found that academics' satisfaction with the communication and management of change in their institutions was considerably lower than recommended levels in 2008 and deteriorated further over the study period.

Most change management initiatives fail; this can be exacerbated by mistrust of the changes that have been imposed, feelings of uncertainty about their impact and the belief that too many changes have occurred. Change fatigue refers to a sense of passive resignation or apathy towards organizational changes (Bernerth et al., 2011). We found a high level of change fatigue among our sample of over 5 000 academics; for example, more

than half (57 per cent) agreed or strongly agreed that too many change initiatives had been introduced in their institution and nearly seven out of ten (68 per cent) found the pace of change to be overwhelming (Kinman & Wray, 2014). A considerable majority (76 per cent) agreed at least “somewhat” that a period of stability was required, with 41 per cent expressing strong agreement. Change fatigue has been associated with burnout, low job satisfaction and engagement and can also encourage withdrawal behaviours (Bernnerth et al., 2011). How to increase employee voice in informing future change should be a key consideration and the potential impact on their wellbeing considered as part of a risk assessment.

Interventions <a>

Given the evidence that academic employees are at high risk of work-related stress, burnout and mental health problems it is crucial to consider how to improve their wellbeing. The value of a systemic approach to managing stress at work has been highlighted, with interventions required at primary, secondary and tertiary levels. The business case for improving staff wellbeing, in terms of reduced sickness absence and turnover and improved productivity, is well-established but awareness of the financial benefits of introducing initiatives remains low in UK universities and provision is inconsistent and of varying quality. A report commissioned by research funding bodies in the UK (Shutler-Jones, 2011) identified some areas of good practice in universities, with interventions mainly targeted at management (for example, executive coaching, peer support and leading change) and secondary interventions for staff in general. Little information was available on the effectiveness of these initiatives, but benefits were claimed in several areas such as better scores on employee wellbeing surveys, reduced sickness absence, and improvements in self-reported flexibility, support and productivity.

An evaluation of a multi-level stress management intervention introduced in an Australian university (Pignata & Winefield, 2015) considered the effectiveness of organization-focused strategies (such as stress awareness, improving communication and

the management of change, and increasing trust) and staff-focused interventions (such as the introduction of bullying/harassment policies, recognition of excellence, and lifestyle management). Although post-intervention interviews highlighted some benefits for autonomy and acknowledgement of good work, staff continued to see their work as stressful and many were unaware that any initiatives had been implemented. This suggests that strategies to improve staff wellbeing need to be recognised as such and they should be well publicised, and staff encouraged to participate. Another study conducted by the same team (Pignata et al., 2016) with staff in 13 Australian universities suggested that the introduction of stress management interventions was unlikely to improve wellbeing if perceptions of organizational justice and trustworthiness of senior management in the institution were low.

Although multi-level interventions are required, initiatives that aim to reduce the risk of work-related stress at source are more effective than those seeking to improve the stress management skills of individuals (Nielsen & Noblet, 2018). Our research outlined above has confirmed the value of using a validated, risk-assessment approach to diagnose the key psychosocial hazards in a particular occupational group, rather than a more 'ad hoc' approach that does not permit comparison between sectors or allow a body of knowledge to be developed. The findings have strong potential to address the root causes of stress and ensure that individual universities, and the sector in general, are better placed to respond to the challenges faced by staff now and in the future. The costs of ignoring the deteriorating wellbeing in the university sector could be significant in terms of lost talent, low engagement, high absenteeism and reduced job performance, as well as the personal costs for individuals and their families.

Our findings suggest that priority should be given to reducing demand, improving working relationships and managing change more effectively. Nonetheless, a systemic approach is required, as each of the seven areas of work activity we assessed should not be considered in isolation. As discussed above, poorly managed change is likely to exacerbate demands and role stress, impair working relationships and reduce support from managers

and colleagues. Moreover, although satisfaction with job control met the minimum standards, the gradual erosion of autonomy perceived by UK academics will be linked to their lack of voice in influencing the change process. It is likely, therefore, that input into decision-making and setting goals and priorities will improve wellbeing and encourage individuals to embrace change rather than resist it.

Line managers have a powerful influence on the wellbeing of their staff, so interventions that improve their competencies can be particularly effective. Based on extensive research in different sectors, Donaldson-Feilder et al. (2011) have identified the line manager behaviors that can prevent and reduce stress in employees. The four core skills are: 1) managing with respect (managing emotions in self and others effectively, having integrity, being considerate and taking responsibility); 2) managing existing and future workload (proactive work management, effective problem-solving and empowering others); 3) managing individuals (being accessible, sociable and empathic) and 4) managing relationships (dealing with conflict and taking responsibility for resolving issues). This framework has strong potential to inform policy and procedure for the selection, training and development of managers who will help reduce psychosocial hazards and improve resilience.

Work-life conflict is a powerful source of distress among academic employees. Another framework that could help improve their wellbeing has identified the line management behaviors that can enable their employees to improve their work-life balance. Hammer et al. (2007) has emphasised the importance of: a) emotional support (learning about people's work-life balance needs and listening to problems); b) instrumental support (helping employees avoid conflict between work and personal life); c) role modelling (demonstrating effective work-life balance behaviors personally) and d) creative work-life balance management (generating novel strategies to reduce conflict between life domains and highlighting the benefits of work-life balance for wellbeing and job performance). These two frameworks could be supplemented with more job-specific factors within the core skill

areas. For example, the high risk of email stress in the university sector discussed above suggests that managers, as well as staff members, should identify and role model the healthy management of technology. Although managers have a key role to play in reducing stress in their staff, it is clearly important that these responsibilities do not compromise their own wellbeing.

Conclusion <a>

The importance of autonomy, respect and professional identity to the wellbeing of academic staff highlighted in this chapter suggests that participatory approaches will be particularly helpful in identifying ways to reduce the work-related stress they experience. Employees themselves are also ideally placed to suggest opportunities to increase their job satisfaction. Action research techniques could draw upon key frameworks of work stress, such as the Effort-Reward Imbalance model (Siegrist, 1996) discussed above and the Job Demands-Resources model (Bakker & Demerouti, 2017), to help shape practical, low-cost interventions to reduce workloads, enhance perceptions of control, reduce any imbalance between efforts and rewards, and help academics maintain a healthy work life balance. Longitudinal research conducted by Boyd et al. (2011) suggests that procedural fairness as well as job autonomy are particularly important resources for mitigating the negative effects of job demands in academic staff. Conservation of Resources theory (Hobfoll & Shirom, 2000) would also be useful in helping employees identify the resources that could mitigate current and future resource loss and, accordingly, reduce stress and burnout and improve satisfaction and engagement. Moreover, participatory techniques could be used to identify the tasks that academic staff find unnecessary and unreasonable and how they might be better managed to enhance control and foster professional identity and self-efficacy.

In conclusion, although we have identified some priority areas for interventions to improve the wellbeing of academic staff, little is yet known about employees on fixed-term and hourly paid contracts. Such contracts are widespread in UK universities, with one-third of all academic staff and two-thirds of research-only staff employed on a fixed-term basis in

2016/17 (HESA, 2018). A high proportion of academic staff in Australia are also on 'contingent' contracts (fixed-term and casual/sessional), accounting for half of the overall teaching in its universities (Ryan et al., 2013). Job insecurity is a long-standing challenge in the higher education sector, particularly for early-career researchers who are often employed on successive short-term contracts. By the nature of their work, they are often harder to access than academics on permanent contracts, but future research should examine their experiences and the support they require to attenuate the pressures they face.

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