

EMERGENCY SERVICES WORKFORCE 2030 - CHANGING WORK LITERATURE REVIEW

Compiled by Jane X.Y. Chong¹, Blythe McLennan² and Patrick D. Dunlop¹

¹ Future of Work Institute, Curtin University, WA

² Centre for Urban Research, RMIT University, Melbourne





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Steering Committee

The Workforce 2030 project was guided by a Steering Committee made up of emergency management sector representatives:

- Nancy Appleby, Department of Fire and Emergency Services, WA
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Research Advisory Panel – Changing Work literature review

The Research Advisory Panel comprised of academic researchers external to the project. Panel members individually reviewed sections of the Workforce 2030 literature reviews and provided detailed feedback specific to their research expertise that has been incorporated into the final outputs.

- Professor Chris Bearman, Central Queensland University (general review of Changing work literature review)
- Dr Peter Hayes, Central Queensland University (Managing mental health and wellbeing)
- Dr Pam Kappelides, La Trobe University (Managing volunteer workforces)



EXECUTIVE SUMMARY

The *Changing Work Literature Review* collates a high-level evidence base around nine major themes related to internal workforce management approaches and working environments of fire, emergency service, and rural land management agencies. It is an output of the *Workforce 2030* project and is one of two literature reviews that summarise the research base underpinning a high-level integrative report of emerging workforce challenges and opportunities, *Emergency Services Workforce 2030*.

Workforce 2030 aimed to highlight major trends and developments likely to impact the future workforces of emergency service organisations, and their potential implications. The starting point for the project was a question:

What can research from outside the sphere of emergency management add to our knowledge of wider trends and developments likely to shape the future emergency services workforce, and their implications?

The *Changing Work Literature Review* focuses on nine themes relevant to changes that have implications for emergency service organisation's internal workforce management approaches and working environments: 1) Recruitment, assessment, and selection, 2) Socialisation and training, 3) Work design, 4) Diversity and inclusion, 5) Managing mental health and wellbeing, 6) Leadership, 7) Change management, 8) Managing an ageing workforce, and 9) Managing volunteer workforces.

Theme	Selected key trends and developments	Selected potential implications for emergency services
1. Recruitment, assessment, & selection	Employer brand, reputation, and image are becoming increasingly important considerations among jobseekers; Organisations are increasingly engaging in gamified and virtual reality for immersive assessments; Attracting, assessing, and recruiting talent presents time and logistical burdens that are ripe for automation.	An increased demand is anticipated for non-technical skills; There is an increasing focus on creating a positive candidate experience and ESOs may wish to review their applicant process; Emergency services must ensure they offer an attractive employee value proposition for highly in-demand workers (e.g., data scientists); Social presence, online reputation and brand management is very important; There may be differences emerging between applicants and current personnel, e.g., demand for flexibility.



Theme	Selected key trends and developments	Selected potential implications for emergency services
<p>2. Socialisation & training</p>	<p>There is an increased recognition and focus on newcomers' proactivity, autonomy, and fresh perspectives in shaping the socialisation process; We have much more to learn regarding how organisations might best calibrate their socialisation and training strategies for rapid onboarding; Increasing virtualisation of work presents significant new challenges for successful socialisation.</p>	<p>It is vital that rapidly onboarded ES teams quickly build a shared understanding of operations and goals, which necessitates a new way of approaching the socialisation process; Technology offers many exciting opportunities, however, rapid technological change also means that workers must develop a proclivity for continuous learning; Provision of virtual training makes training more accessible to the emergency service workforce; ESOs can leverage training offerings to attract and retain volunteers.</p>
<p>3. Work design</p>	<p>Work redesign can mitigate illness while promoting meaningful and engaging work; Proactive attention is needed on how to design work with both humans and technology; Relational aspects of work are critical resources to reduce challenges of remote working.</p>	<p>ESO's need to be willing to redesign work and work contexts to accommodate changes in people as they age; It is important ES workers feel engaged and motivated, yet not overly stressed and burdened through SMART work design; While technology continues to advance rapidly, the basic tenet of work design theories will remain unchanged.</p>



Theme	Selected key trends and developments	Selected potential implications for emergency services
<p>4. Diversity & inclusion</p>	<p>Building diversity and inclusion in the emergency management sector is critical for managing human, social and innovation risk associated with hazards, which can enhance overall performance and organisational success; Central D&I workforce attributes, skills, and capabilities have been identified, such as empathy. Subtle, covert and interpersonal discrimination are still prevalent and influential; Gender, race and age stereotypes explain why same work behaviours receive different outcomes.</p>	<p>The structures and cultures of the emergency management sector require transformational change in order to realise the benefits and performance improvements that come with greater diversity and inclusion (D&I); Research with EM organisations found common aspects that support effective D&I programs, including having safe spaces where difference is welcomed, an authorising environment, and understanding an organisation's interactions with communities and other institutions; Many of the most important workforce attributes, skills and capabilities needed to support D&I implementation are ones that are not traditionally emphasised or prioritised in EMOs.</p> <p>It is critical to increase awareness amongst managers of the prevalence of stereotypes and of their potential impact on our decisions; There is a need to implement actionable steps that reinforce climates of inclusiveness in emergency services; There is a need to better balance directive (e.g., crisis driven, command and control) leadership styles with more inclusive leadership styles.</p>
<p>5. Managing mental health & wellbeing</p>	<p>There is increasing public awareness of the links between mental health and work, which in turn is requiring organisations to respond; move from individual, reactive approaches to systemic, integrative, holistic, and proactive approaches; Technological advancements are both helping and hindering workers' mental health and wellbeing.</p>	<p>As technological advances continue to change the emergency management landscape and work, it is imperative to develop or modify work systems while including workers' mental health and wellbeing as a primary consideration; Using an evidence-based framework (e.g., Thrive at Work framework), organisations can adopt an integrated, strategic, and proactive approach to addressing mental health in the workplace; poor workplace practices and culture is as debilitating for emergency service personnel as is exposure to trauma; Employees are more likely to look for workplaces that support their mental health and wellbeing.</p>



Theme	Selected key trends and developments	Selected potential implications for emergency services
<p>6. Leadership</p>	<p>There is an increasing level of adaptive challenges and extreme contexts requiring non-technical skills and adaptive leadership; Effective volunteer leadership is essential for retaining a volunteer workforce and to manage its diversity; There is an increasing need to focus on advancing capabilities that endure over time and continuously evolve to adapt to the changing environment.</p>	<p>ESOs should focus on developing adaptive leadership capacity at all levels of organisation by training leaders to operate in a variety of different context and situations; Leadership development programs for ES leaders must build capacity in critical reflection and in critical thinking to allow participants to examine the cultures and structures in ESOs; Volunteer leaders should promote feeling of competence among female volunteers by offering ample opportunities to master difficult tasks; Volunteer leaders should be more supportive and encouraging of younger volunteers, while providing more structure and direction to older volunteers.</p>
<p>7. Change management</p>	<p>It is imperative that organisations turn to evidence-based recommendations related to change management; Self-efficacy, meaning, and belongingness are key psychological mechanisms for the adoption and maintenance of organisational change; Leaders act as important “champions of change”; There is an increasing need to invest in organisational resilience for an increasingly disruptive and uncertain future.</p>	<p>Organisational change methods are critical in managing the change that accompanies the integration of AI and other technology into work methods; In implementing any change initiative and considering change practices, it is critical to consider their implications on organisational members' perceptions of self-efficacy, meaning, and belongingness to facilitate adoption and maintenance of change behaviours; Direct supervisors are most important for implementation-related and job-relevant information during change, whereas strategic information may be best communicated by senior management; ESOs may wish to train or select leaders that are transformational, authentic, or those that have referent power to lead a change initiative. There exists some evidence suggesting that supportive leadership and role modelling from senior management are essential in enhancing the credibility of change in paramilitary settings.</p>



Theme	Selected key trends and developments	Selected potential implications for emergency services
<p>8. Managing an ageing workforce</p>	<p>Many still hold stereotypes against mature workers; There is increasing evidence for work design (or redesign) as a strategy to promote successful ageing; An age-diverse workforce that is properly managed increases human capital in terms of knowledge, skills, and abilities.</p>	<p>ESOs may wish to carry out a forecast of their workforce age structure; One avenue of addressing future labour shortage is for ESOs to develop talent pipelines by starting their recruitment strategies earlier with younger workforce or volunteer participants; ESOs may wish to adopt a proactive rather than reactive approach to manage their diverse workforce, such as using the Include, Individualise, and Integrate model; There should be a consideration of how to adapt technology to fit an age-diverse workforce rather than only focusing on adapting workers to technology.</p>
<p>9. Managing volunteer workforces</p>	<p>Shifts in external and organisational contexts have made volunteer management more complicated; There is growing recognition of differences between volunteers and paid employees from a HRM perspective; Professionalisation and managerialism have mixed and complex impacts on volunteering and HRM of volunteers that are not yet completely understood.</p>	<p>Differences between volunteers and employees have implications for HRM practices, with some standard employee HRM practices less likely to be effective with volunteers; The most effective HRM practices for volunteers balance the need for management with flexibility and emphasise more relational rather than transactional approaches; ESOs need to ensure that they actively manage relationships between volunteers and paid staff; Strong organisational support for volunteer coordinators and managers within HR departments is important; There are many areas of HRM for volunteers where further knowledge is needed.</p>



INTRODUCTION

The *Changing Work Literature Review* collates a high-level evidence base around nine major themes related to internal workforce management approaches and working environments of fire, emergency service, and rural land management agencies. It is one of two literature reviews that summarise the research base underpinning a high-level integrative report of emerging workforce challenges and opportunities, *Emergency Services Workforce 2030*.

The workforces of these agencies and organisations include career and volunteer members. They also include first responders as well as support staff and volunteers in professional services, technical, and administrative roles. For brevity, we refer to these agencies as 'emergency service organisations' (ESOs) and their workforce as the 'emergency services workforce'.

While the *Changing Work Literature Review* focuses on the emergency service workforce, it also recognises that the emergency services are part of a wider emergency management workforce that is diverse and changing. The full emergency management workforce extends far beyond emergency services to include the volunteer and paid workforces of not-for-profits active in recovery, local governments, wider community and faith-based organisations, government departments, private businesses and more. Therefore, this review considers the future emergency services workforces within the context of how they interact with and form a part of this wider workforce.

THE PROJECT

The *Change Work Literature Review* is an output of the *Workforce 2030* project. *Workforce 2030* aimed to highlight major trends and developments likely to impact the future workforces of ESOs, and their potential implications.

The starting point for the project was a question:

What can research from outside the sphere of emergency management add to our knowledge of wider trends and developments likely to shape the future emergency services workforce, and their implications?

It was a question raised in response to a Workforce and Volunteerism Research Advisory Forum held by the Bushfire and Natural Hazards Cooperative Research Centre (BNHCRC) in May 2019. This forum highlighted the need for a 'big picture' view of current research that can inform future-focused workforce problem-solving in emergency service organisations.

The emergency management sector already benefits from a strong body of research on a range of issues influencing the future emergency services workforce and future capability needs. Much of the most recent research has been undertaken within the research program of the Bushfire and natural Hazards CRC (BNHCRC). A focus within this research has been the development of tools and resources to assist planners and managers within the sector make decisions about the future.



In this context, the objectives of the *Workforce 2030* project were to:

1. Review a wide selection of future workforce-related research from outside the emergency management sphere and summarise major trends and developments it reveals.
2. Identify potential implications of these trends and developments for the future emergency services workforces, including those highlighted within emergency management research.
3. Highlight key BNHCRC research projects that provide important knowledge and tools for strategic decision making and workforce planning in the emergency services.

THIS LITERATURE REVIEW

The *Changing Work Literature Review* loosely follows the employee/volunteer lifecycle. It focuses on nine themes relevant to changes that have implications for emergency service organisation's internal workforce management approaches and working environments, shown also in Figure 1.

1. Recruitment, assessment, and selection,
2. Socialisation and training,
3. Work design,
4. Diversity and inclusion,
5. Managing mental health and wellbeing,
6. Leadership,
7. Change management,
8. Managing an ageing workforce, and
9. Managing volunteer workforces.

These themes were identified through the collation of information from several sources including: 1) major findings in other studies of major trends, 2) consultation with researchers familiar with the emergency management context, 3) consultation with emergency service workforce managers on the Project Steering Committee and beyond, and 4) consultation with existing workforce strategies.

A second, accompanying literature review, the *Changing Landscape Literature Review*, focuses on another seven themes related to the changing external environment within which ESOs operate.



EMERGENCY SERVICES WORKFORCE 2030



FIGURE 1: WORKFORCE 2030 THEMES



1. RECRUITMENT, ASSESSMENT, AND SELECTION

Associate Professor Patrick Dunlop, Dr Djurre Holtrop, and Dr Jane Chong
Future of Work Institute (FOWI),
Curtin University

With increasing competition for human talent, there is greater recognition of the roles that recruitment and selection play in organisational strategy to achieve competitive advantage (Ployhart et al., 2017). Recruitment refers to any activities or processes that determine how an organisation attracts new prospective members. New members can include volunteers, new applicants to paid roles, or contractors. Recruitment is the feeder into the selection process (Schneider, 1987), which refers to the process by which an organisation decides to extend an offer to a recruit to formally join the organisation. Between recruitment and a selection decision is usually an assessment phase. The assessment phase includes any activities or processes that organisations take to understand the characteristics of prospective new members (i.e., the people that were attracted during recruitment). Assessments are undertaken so that prospective members' fit with the organisation, and the role or roles therein, can be evaluated. This is often accomplished by considering the characteristics of the individual in relation to selection criteria, that is, the standards against which a prospective new member is judged when considering whether that new member would fit in the organisation. In this chapter, we refer to the whole process as recruitment, assessment, and selection (RAS).

1.1. KEY TRENDS AND DEVELOPMENTS

Currently, the recruitment, assessment, and selection (RAS) domains are undergoing substantial change. Some of these changes have emerged organically, being a natural 'by-product' of growth in technological capability. We refer to these as 'supply-side' drivers of change and discuss these changes first.

1.1.1. Employer brand, reputation, and image are becoming increasingly important considerations among jobseekers. As such, organisations and talent acquisition professionals are investing more heavily in managing their digital footprint to attract talent.

Technology is playing an increasingly important role in RAS alongside other business processes. Most, if not all organisations use at least some online services for their recruitment, with many using some form of social media (Mulvey, 2013). More recently, research has focused on how job applicants view organisations in terms of their "employer brand", reputation, or image (Dabirian et al., 2017, 2019). Organisations can leverage the internet for talent attraction and reputation building through mass advertisement and virtual forms of 'word-of-mouth' social media content (e.g., Facebook, LinkedIn). Indeed, organisations' digital footprint and reputation as seen through websites such as Glassdoor.com and Seek.com.au, or through Google Reviews are becoming increasingly important considerations among jobseekers. Indeed, research has shown that candidates' employee brand equity perceptions – the perceived worth of an



organisation as an employer – can be influenced through their knowledge of the organisation's recruitment practices (gained through word of mouth). Furthermore, a candidate's awareness of the organisation's products and services can also influence the recruitment process and its consequences (Collins, 2007; Collins & Stevens, 2002). Recognising the importance of a strong employer brand for attracting talent, organisations and talent acquisition professionals therein appear to be investing more heavily in managing their employer brand.

1.1.2. Organisations are increasingly engaging in gamified and virtual reality for immersive assessments. Alongside applicants' favourable regard for such assessments, these developments also allow for high fidelity assessments such as work sample/work simulation tests that are considered gold standard in predicting future job performance.

Organisations are also increasingly engaging in gamified and virtual reality technology to deliver immersive assessments. Gamification refers to the use of gaming elements in non-game contexts (Collmus, Armstrong, & Landers 2016; Deterding, Dixon, Khaled, & Nacke, 2011). Gamification principles are already being applied to assessments of cognitive abilities, with initial evidence showing that many applicants regard these favourably (Georgiou & Nikolaou, 2020). A likely and important development in this space, however, is the rapid evolution of higher fidelity assessments. Of note, work sample tests (also sometimes called work simulations) are a type of employment assessment where candidates "perform a selected set of actual tasks that are physically and/or psychologically similar to those performed on the job" (Ployhart et al., 2005). Work samples, provided they are designed well, are very good assessment tools because they are the strongest type of predictor of job performance; that is, a person who performs well in a representative work sample is very likely to perform well on those tasks when in the job. A limitation of classical work samples tests, however, is that as truly high-fidelity simulations can be difficult to construct, and even where it is possible, it can be difficult and expensive. Potentially, virtual reality technology will allow for the construction of very high-fidelity work samples and simulations that will benefit candidate engagement, provide a realistic job preview for the candidate, and improve recruiters' ability to gauge candidates' likely future job performance.

Indeed, virtual reality developments may allow organisations to simulate high-risk environments or settings and test candidates' abilities with the 'real' risks being removed. Virtual reality environments are also likely to be adaptable to assessments involving multi-user or multi-team systems, and thus may be particularly relevant for assessing potential for roles involving teamwork, communication, and situational awareness in challenging environments. Meanwhile, advancements in 'physical technology' (see Changing Landscape Literature Review, 'Physical Technology' section), when coupled with virtual reality, could also allow the inclusion of additional physiological measurements (e.g., heart rate monitors) as complementary assessment tools to gauge how people are responding to these work scenarios. Despite much buzz and hype around the use of gamified and virtual reality in assessment practices, it is important to note that there remains scarce empirical and published literature supporting their use currently (Woods et al., 2019). Ultimately, more research is



required to learn which features of technological developments for pre-employment assessments are most critical for predicting future work success and free from bias, but the early signs of their high potential are promising (e.g., Weiner & Sanchez, 2020).

1.1.3. Attracting, assessing, and recruiting talent presents time and logistical burdens that are ripe for automation.

In recent times, automation technology has spurred significant process improvements in the RAS process, such as automation in increasing efficiency in CV screening and candidate ranking, interview scheduling, managing job descriptions, and distributions of job channels. Other examples of how technology has transformed the RAS process include:

- Improving the candidate experience through Applicant Tracking Systems (ATS) with features that automate decision-making (e.g., CV screening), and communication, ultimately reducing time between an applicant expressing interest in a role and receiving a communication (time to first contact), and the time between a job application and an employment offer (time to hire),
- Development of flexible and remote assessments (e.g., digitally mediated interviews, asynchronous interviews, mobile app-based assessments) that grant access to candidates from a global market.
- Cross-system integration, enabling streamlined, single-site, candidate experiences throughout a selection process,
- Centralised record-keeping services (e.g., skills or qualifications databases), which allows for rapid portability of personnel (potentially critical to volunteering in areas with transient workforces) or the cumulation of talent pools and communities to draw from during periods of high demand.

Developments in AI technology also allows access to richer individual data and complex predictive algorithms, enabling the rapid automated assessment of candidate data including sources of data not previously considered. These data can include “digital footprints” (e.g., social media, ‘Google’ search patterns), written language (e.g., speech transcripts, documents, written responses to interview questions), or video-based information (e.g., a digital autobiography, or a public address). Nascent research has shown that meaningful individual differences such as personality or communication styles can be detected in these types of information (e.g., Choudhury et al. 2019; Harrison et al., 2019, 2020) and inferences can be drawn about candidates’ knowledge, skills, abilities, and other characteristics (Aguado et al., 2016; Nikolaou, 2015). These types of information may also allow for the assessment of previously difficult to assess characteristics, and the ‘smarter’ targeting in recruitment campaigns (e.g., targeting under-represented groups or people with particular skills, interests, or other characteristics).



1.1.4. It is important not to neglect context and expert judgement as we have yet to fully explore how to optimise the collaboration between human decision makers and AI decision aids.

Alongside the increasing appetite for using algorithms in hiring, there is also a growing potential for over-reliance on such means. Algorithms, or computer programs that utilise complex statistical models to combine variables to predict an outcome (e.g., job performance) or automate a process (e.g. eliminate unqualified candidates), have the ability to provide on par or superior predictive power for assessing candidates (Grove et al., 2000; Kuncel et al., 2013). However, there remains a strong case for human-algorithm collaboration and organisations should wisely use intelligent algorithms while taking advantage of expert perspectives to manage their talent acquisition strategies (Neuman & Burke, 2019; Willford, 2019). Currently, researchers have yet to fully explore how to optimise the collaboration between human decision makers and AI decision aids (Willford, 2019).

There are, however, discussions on several major points of contention regarding the use of automation and AI-based tools for assessment and selection processes (Tippins, et al. 2021), and these are likely to 'come to a head' in the next decade. We review three here briefly. The first major concern relates to the perceptions of the invasion of privacy associated with the use of social media information for selection decision making. While candidates appear relatively comfortable with professional social networking sites being consulted by recruiters for the purposes of "cyber-vetting", this is not true for 'casual' social media sites (Cook et al., 2020). Second, related to the issue of privacy is that of perceived transparency, which is known to be positively associated with candidates' reactions to a selection process (McCarthy et al. 2017). If candidates are not able to understand *how* they are being assessed, they may react negatively to a selection process, believing it to be unfair, risking litigation claims. These transparency concerns are likely to be extremely relevant in the near future (e.g., demands for transparency around what information an "AI-based" algorithm is using to evaluate candidates), but are already relevant today as unconventional tools such as social media are being used by recruiters in ways that are not clear (Roth et al., 2016). Third, algorithms used for selection decision making, whether grounded in AI or not, must be developed using appropriate and representative 'training' data sets. Failures to train AI models with representative data can result in biases being 'baked into' the algorithm. For example, an experimental algorithm created by Engineers at Amazon to provide recruiters with recommendations for whom to recruit for technical jobs was found to discriminate against women. This is because the data used to train the algorithm was heavily reliant on data from a previous 10-year period whereby these jobs were largely held by men (Weissman, 2018). This prominent example serves as a cautionary tale of digital bias and their unintended consequences. Further, it remains unclear to researchers what data are being used to train some AI selection tools, and whether those data include the measures of job performance that selection tools hope to help predict (Tippins et al. 2021). Researchers, and computer and data scientists are participating in lively discussions about the ethical and practical issues, and there is little doubt that legal frameworks that inform practices in RAS will change over the next decade.



1.1.5. There is increasing focus on fairness and improving diversity within organisations through RAS.

Changes in society are pushing RAS research to evolve in new ways, one of which includes the topic of fairness and improving diversity within organisations. Indeed, many organisations are striving towards a diverse workforce and have diversity hiring goals as part of their mission. Researchers have highlighted the need to identify a capable workforce with the prerequisite knowledge, skills, and abilities regardless of candidates' race, ethnicity, age, gender identity (etc.) to maintain a competitive advantage (Ployhart et al., 2017). Much research has focused on identifying recruiting tactics and media that increase the attraction of diverse candidates. Importantly, research linking recruitment to diversity and selection show that targeting a diverse and qualified improves fairness in subsequent hiring decisions (Neuman & Lyon, 2009). On the other hand, indiscriminately attracting large numbers of minority candidates – notwithstanding their skills or qualifications – is likely to exacerbate adverse impact as many such candidates will ultimately be rejected (Ployhart et al., 2017). The increasing focus on fairness and diversity, such as through identification on culture-fair assessments is integral in ensuring more representativeness of Australia's multi-cultural composition in different industries and workforces. More work is required especially with respect to the appropriate recruitment and assessment of First Nations People (e.g., Pearson & Daff, 2011), and the demand for this knowledge is likely to increase.

1.1.6. There is an increasing focus on holistic perspectives in RAS.

As highlighted in many sections of this report, current and future organisations are likely to operate under volatile, uncertain, and complex conditions. Accordingly, there are increasing interest in assessing 'future skills' that are relevant to the work context of increasing uncertainty and interconnectedness (see MAPNET 'Change Management' section), such as

- Non-technical teamwork skills
- Ability to adapt effectively to change
- Ability to create positive change
- Lifelong learning orientation
- Resilience and mental wellbeing

Additionally, academics have called for a more holistic perspective on recruitment, assessment, and selection, such as aligning recruitment with next stages in organisations ranging from onboarding to good work design, through to employee turnover as they are "different sides of the same talent equation coin" (Ployhart et al., 2017).

1.2 POTENTIAL IMPLICATIONS

- An increased demand is anticipated for non-technical skills amongst non-volunteers and volunteers for incident management teams, including situation awareness, decision making, teamwork (cooperation, coordination, communication), leadership and coping, stress, and fatigue management



(Hayes et al., 2020). ESOs may wish to incorporate these skill categories into the recruitment, assessment, and selection of personnel as well as training existing workforce.

- With increasing demand for (differently) skilled employees as well as more 'demanding' applicants, there is an increasing focus on creating a positive candidate experience, particularly in the corporate world. Time to hire, or having a fast selection process, is an example indicator that some organisations use to estimate the quality of their candidates' experiences. ESOs may wish to review their applicant process and assess candidates' experiences to remain competitive in the search for talent, particularly in a data-driven, complex network working environment in the future. This also extends to the volunteer selection, where candidate withdrawal may be a greater risk.
- Large scale emergency response is likely to increasingly adopt a centralised 'command and control centre' model, involving remote operations, multi-team systems, real-time data collection and processing. This will create a demand for new skill sets (e.g., data scientists who can partner with subject matter experts, computer scientists who can program these solutions) meaning the emergency services must ensure they offer an attractive employee value proposition for these highly in-demand workers.
- The emergency service workforce has an opportunity, and some would argue a need to attract and retain a more demographically diverse workforce, especially amongst its operational personnel and volunteers. This will improve community representation among operational personnel and volunteers. An example of a useful resource for best practice guidelines for inclusive recruitment is the Recruit Smarter report recently released by the Department of Premier and Cabinet Victoria and The Centre for Ethical Leadership at the University of Melbourne, where they highlight example interventions to develop inclusive recruitment practices and address unconscious bias in recruitment, including CV de-identification, unconscious bias training, and strategic use of language in job advertising.¹
- Relatedly, alongside an ageing workforce, ESOs may wish to consider hiring more young workers depending on the capabilities required. In this sense, organisations may consider improving the attractiveness of organisations to younger people through gamified and virtual reality recruitment and assessment techniques.
- More flexible volunteering models have been proposed, but these will require some mediating support from technology. For example, regions with transient workforces (e.g., FIFO or seasonal workers) could benefit from recruiting volunteers who can be deemed job-ready no matter their location.
- Alternative recruitment of volunteers might involve partnering with local employers, who are willing to commit to allocating work time to emergency response and may be able to partner with emergency services to deliver or benefit from training.

¹ See <https://www.vic.gov.au/recruit-smarter>



- Potentially a greater expectation for emergency services in the same geographical locations to align their recruitment practices through digital means.
- Recruitment should be connected to other parts of the employee lifecycle (e.g., training, engagement, retention, and turnover.)
- Technology: Social presence, online reputation and brand management is very important. For example, in the volunteering space, this is perhaps a bit neglected in that it does not seem to be a priority as there is so much variability in investments that units put into their social presence. Volunteer groups will need support from their parent organisation in terms of increasing social presence.
- Differences emerging between applicants and current personnel:
 - Current personnel consist of predominantly white (older; in case of volunteering) males, whereas applicants reflect a more diverse population. This implies a larger gap between recruiters and (potential) recruits.
 - Applicants interested in more flexible opportunities (especially for volunteering, perhaps also for paid)



1.3 RELATED RESEARCH

Recruitment and retention toolkit (University of Western Australia, Curtin University, DFES, BNHCRC)

- See <https://www.bnhcrc.com.au/driving-change/future-workforce>
- The Recruitment and Retention Toolkit for Emergency Volunteer Leaders was designed to support emergency services leaders with their volunteer management practices. The Toolkit includes easy-to-use guides about: recruiting volunteers for emergency services, supporting new volunteers, volunteer management, emergency volunteer recruitment messaging, and volunteer succession planning.

This evidence-based Toolkit is the product of a partnership between the CRC, Curtin University, University of Western Australia, and Department of Fire and Emergency Services (WA).

Changing management practice study (University of Western Australia, Curtin University, BNHCRC)

- See <https://www.bnhcrc.com.au/research/resilience-hazards/3533>
- This study was part of the Enabling sustainable emergency volunteering project. It aimed to support EMOs to improve volunteer retention through effective on-boarding, and potentially through adapting volunteer roles and pathways, and to measure progress towards building a culture of inclusion amongst their volunteer base that supports effective on-boarding.

Valuing volunteers: Better understanding the primary motives for volunteering in Australian emergency services project (University of Wollongong, BNHCRC)

- See <https://www.bnhcrc.com.au/research/phd-valuingvolunteers>
- “The primary research questions ... ask why people volunteer for emergency service organisations (like the SES) and what are their expectations of the experience; what is the workplace reality for volunteers in an emergency service organisation and why is that so; how does an emergency service organisation better recruit and maintain the satisfaction and commitment of its volunteers and retain their services.”

Improving the retention and engagement of volunteers in emergency service agencies project (University of Wollongong, BNHCRC)

- See <https://www.bnhcrc.com.au/research/volunteerretention>
- “Many volunteer-based emergency service agencies experience high rates of volunteer turnover, in some cases as high as 20% each year. At times, up to half of all new recruits leave within the first two years. Finding out why this happens – and developing ways to improve volunteer retention – has been the focus of this study.”

Enhancing volunteerism project (La Trobe University, BCRC)

- See <https://www.bushfirecrc.com/projects/d3/enhancing-volunteerism>
- “The Volunteerism project has provided fire services across Australia and New Zealand with information to help strategic planning and policy development concerning volunteer numbers and suggested new ways of recruiting and supporting volunteer workforces.”



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2. SOCIALISATION AND TRAINING

Dr Hawa Muhammad Farid, Dr Jane Chong, and Professor Marylène Gagné
Future of Work Institute (FOWI),
Curtin University

Socialisation is the process whereby an organisational “outsider” (i.e., a non-member), is transformed into an organisational “insider” (Feldman, 1981 and Figure 2). It is commonly defined as “a process by which an individual acquires the social knowledge and skills necessary to assume an organisational role” (Van Maanen & Schein, 1979, p.211. See also Box 2.1.).

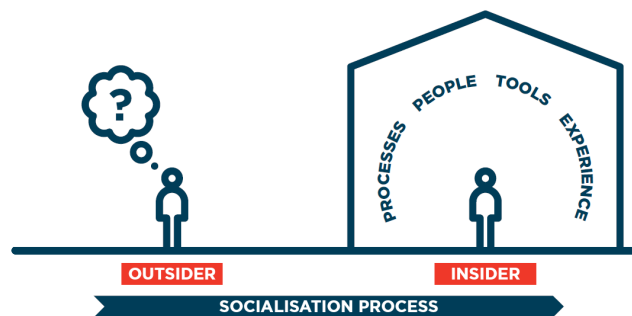


FIGURE 2: THE SOCIALISATION PROCESS

At their core, newcomer workplace entry and training are components of human resource management. Organisations can contribute to the socialisation process through human resource practices such as onboarding, training, and influencing newcomers through different socialisation strategies. Research has revealed that the ways in which an organisation integrates newcomers into the organisation can be a significant driver of subsequent attitudes and behaviours. Importantly, ineffective socialisation of new organisational members is a primary source of premature voluntary and involuntary employee turnover (Bauer, Morrison, & Callister, 1998). Within the EM sector, according to Jones and Berry (2017), emergency services organisations can experience up to 20% volunteer turnover, with approximately 50% of all new recruits leaving within the first two years (Jones & Berry, 2017). This can be highly costly to organisations, thereby pointing to the economic importance of a successful socialisation and training process.

Box 2.1: Onboarding vs Socialisation

Onboarding is a narrower term that refers to the specific practices initiated by organisations to facilitate member adjustment to new roles. Socialisation is broader and refers more to the psychological elements of the newcomer experience in an organisation. While it includes onboarding, it also encompasses the learning and adjustment that occurs within the newcomer, including gaining the necessary skills that form part of a role, as well as internalising organisational values. Socialisation can be facilitated by both the organisation (e.g., through onboarding) and the newcomer (e.g., through proactive behaviours).



2.1. KEY TRENDS AND DEVELOPMENTS

2.1.1. Newcomers who enter organisations with 'strong' cultures often struggle to be heard until they have accumulated enough visibility and legitimacy in the eyes of their peers. However, they represent one of an organisation's most important and underutilized assets — a source of fresh ideas, perspectives, expertise. In research, there is an increased recognition and focus on newcomers' proactivity, autonomy, and fresh perspectives in shaping the socialisation process.

Newcomers represent one of an organisation's most important and underutilised assets — a source of fresh ideas, perspectives, expertise, and industry contacts that an organisation can leverage to become more innovative and competitive. However, many newcomers express frustration with an inability to have their ideas heard, considered, or accepted (Lan et al., 2020; Reissner et al., 2019). This problem is particularly true in organisations with 'strong' cultures, such as emergency services. Newcomers at such organisations struggle to be heard until they have accumulated enough visibility and legitimacy in the eyes of their peers. Thus, a key challenge for an 'old' organisation seeking to accommodate new ideas is to capture those fresh ideas and insights from newcomers before these newcomers either internalise the 'old ways of thinking', or simply give up trying to 'change the system'.

As highlighted earlier, organisations can help newcomers feel welcome and gain clarity in their new role through a range of different socialisation strategies. Past socialisation research has revealed the importance for newcomers in gaining clarity and a feeling of mastery over one's job, as well as a sense of social connection with colleagues in the newcomer socialisation process (Ashforth et al., 2007; Bauer et al., 2007; Jokisaari & Nurmi, 2012; Morrison, 2002; Saks et al., 2007). The socialisation strategies that were examined therefore focused on 'moulding' newcomers or ensuring that they conform to the organisation's culture (Lacaze & Bauer, 2014). More recently however, researchers have expanded their focus to explore the importance of newcomers' autonomy and their role in shaping their own socialisation experience, thereby their motivation and engagement as an employee (or volunteer) at the organisation (Chong et al., 2020; Lacaze & Bauer, 2014; Perrot & Campoy, 2009). Chong and colleagues (2020) proposed five strategies that organisations may focus on to ensure their newcomers both learn their role and internalize the organisation's mission/values:

- Insider support refers to the extent to which newcomers have access to and receive support from experienced colleagues, such as buddy-systems or mentoring programs,
- Identity affirmation refers to the extent to which newcomers' identity and personal values are supported and valued,
- Group socialisation refers to the extent to which newcomers have shared experiences with other newcomers (e.g., cohorts of recruits) for learning and support,



- Structured socialisation refers to the extent to which newcomers experience formal introduction, learning, and feedback processes designed to facilitate their adjustment, and
- Agency socialisation strategies refer to the extent to which socialisation experiences focus on encouraging proactivity, autonomy, and personalisation of new members.

2.1.2. As technology changes and many engage in more virtualised work, both training needs and training delivery media are likely to change rapidly. As such, organisations must strategically balance virtual and face-to-face socialisation and training for optimal learning in the digital age.

Apart from ongoing employee development needs, training makes up a large part of socialisation as it provides newcomers with knowledge and competence to perform in their new role. As technology changes and individuals move to more virtualised work, both training needs and training delivery media are likely to change rapidly. Following their review of the literature on training, Bell and colleagues (2017) concluded that the effectiveness of technology-based training is largely unrelated to the medium employed, and instead is determined primarily by the design of the instruction and support given to learners. In specific reference to virtual training, researchers recommend that a blended approach to virtual training be taken for promoting effective adjustment outcomes. According to researchers, technology-based training is suited to teach explicit knowledge whereas face-to-face training is better suited for teaching tacit knowledge characterising interpersonal matters (Gruman & Saks, 2018). For example, a study by Yanson and Johnson (2016) found that an e-learning program was more effective when participants received face-to-face socialisation before the training. Thus, a 'blended' human resource system employing pre-training socialisation programs to provide newcomers chances to develop relationships and a sense of trust with other organisational members may be necessary in lieu of fully virtual socialisation programs.

2.1.3. Rapid onboarding is becoming more prevalent and necessary. However, we have much more to learn regarding how organisations might best calibrate their socialisation and training strategies to accelerate the socialisation process, while simultaneously providing the necessary engaging, personalised experience for new members of their organisation.

Historically, a socialisation or onboarding process has been viewed as a time-intensive process, with researchers measuring newcomer adjustment periods as long as 12-18 months (Bauer et al., 1998). Industry reports suggest that while it takes an average of eight months for new hires to contribute to the organisation at full capacity, approximately a third of these newcomers are at risk of looking for a new job within the first six months, and almost a quarter would leave before a year on the job (Jelinek, 2019). Importantly, however, as technology continues to enable the proliferation of "on-demand" employees (e.g., gig workers, deployable workforces, or workers drawn from latent talent pools) and increasing proportion of labour market consisting of independent freelancers,



the socialisation process is necessarily becoming more short term with rapid lifecycles (Allen et al., 2017). Furthermore, the COVID-19 pandemic and global lockdowns have disrupted many businesses operations, forcing many organisations to quickly socialise new employees into different roles or retrain existing employees on new policies and ways of working at a rapid pace.

Research is currently relatively silent regarding how organisations might best calibrate their socialisation and training strategies to accelerate the socialisation process, while simultaneously providing the necessary engaging, personalised experience for new members of their organisation, that will lead to internalisation of their new roles. New developments from onboarding services organisations (e.g., Enboarder, Flarehr) have highlighted the importance of automating and triggering workflows that onboard people directly into organisational systems. Through digital platforms, organisations may maximise pre-boarding time to help employees feel part of the organisation even before their first day on the job and to track their activities and training timelines to improve productivity (Employee Onboarding Software, n.d.; Wipro Digital, 2020).

2.1.4. The increasing virtualisation of work presents significant new challenges for the successful socialisation of new organisational and team members through virtual platforms.

As geographically dispersed collaborative work groups continue to become more prevalent, work teams are becoming more virtual and need to communicate and coordinate activities using information technology. One of the challenges that accompany virtual teams is the adjustment and adaptation of group members to this new communication environment. Research by Ahuja and Glavin (2003) found that newcomers to an organisation will typically engage in information-seeking behaviours, meanwhile existing members tended to provide information to the newcomers to help facilitate the socialisation process. However, very few studies have thoroughly investigated 'virtual' onboarding- thus, how to do it effectively and the 'best practices' remain unknown. Some evidence suggests that virtual onboarding, in contrast to face-to-face, limits newcomers' ability to develop social understandings of their organisation, as these types of information are often gained through observing the actions and behaviours of others (Ahuja & Galvin, 2003; Korte & Lin, 2013). Additionally, an absence of physical and organic social interactions with established organisational members also appears to limit newcomers' development of social capital and ability to exhibit proactive social behaviours at work (Gruman & Saks, 2018). Thus, the virtualisation of work presents significant new challenges for the successful socialisation of new organisational and team members.

2.2. POTENTIAL IMPLICATIONS

- As the emergency services and the rest of the world become more connected and data dependent, workers will be increasingly collaborating with others through virtual teams. This profound change in work practices poses new challenges for socialisation practices which have historically been face to face. ESOs may need to attend carefully to the social aspects of newcomer adjustment particularly when virtual socialisation processes



become more prevalent to not neglect new members' development of social capital within their respective organisations.

- Related to the point above, there is an increasing need for rapid onboarding of ES teams. As the government pushes for greater integration between jurisdictions and services, it is likely that virtual teams will be constructed 'on the fly' when faced with certain situations. It is vital that these teams quickly build a shared understanding of operations and goals, which necessitates a new way of approaching the socialisation process, as people are socialised into their teams rather than larger organisations. These teams will need to rely heavily on effective non-technical skills and require leaders that both promote and manage these skills; the teamwork tools developed by Hayes and colleagues (2020) can assist in this regard.
- There is an increasing need for rapid onboarding for spontaneous volunteers (see Changing Work Literature Review, 'Changes in Volunteering' section). Recent 2020 events (e.g., COVID-19, Black Summer) provide examples of situations in which emergency service organisations are required to prepare their volunteers for quick deployment if, and when, the need for more volunteers arises. Therefore, several barriers might be removed through the standardisation of training, and the recognition of skills across jurisdictions, that would allow volunteers to operate easily across several regions and/or states. Furthermore, as volunteers are demanding greater levels of flexibility, and with the low costs for them to turnover, the socialisation process should be accelerated to ensure that volunteers are engaged and contributing to ESOs as early as possible in their volunteer journey.
- As we move into more constant, sometimes abrupt, changing environments into the future, ESOs may wish to develop their workforce to have a learning mindset, rather than focusing on task proficiency alone.
- As physical and digital technology changes, there will be implications for training. There is an opportunity for virtual and immersive training, through advanced technology, to provide engaging and more easily accessible training to staff and volunteers. Technology offers many exciting opportunities, for example, virtual and augmented reality systems may allow for high fidelity simulations of otherwise dangerous work. However, rapid technological change also means that workers must develop a proclivity for continuous learning. This is not a new need but is likely to accelerate in the near future (see Changing Work Literature Review, 'Changing Nature of Work' section).
- The provision of virtual training makes training more accessible to the emergency service workforce, such as to volunteers who participate remotely, rural volunteers who may not have access to the main training facilities, as well as employees who are not able to attend face-to-face training as a result of family or work commitments. However, a challenge associated with this approach includes the provision or availability of equipment required for immersive training (e.g., VR set, mock tools) as these are not readily available in households and emergency service facilities.
- The opportunity to learn new skills is a key motivator among emergency services volunteers. This volunteer motivator represents a significant drawcard



for the emergency services, therefore ESOs can leverage training offerings to attract and retain volunteers. Learning new skills helps to ensure that volunteers feel competent and confident in their roles, and is also associated with lower intentions to leave the service (Fahey, Walker, and Sleigh, 2002; Muhammad Farid et al., 2020).

- While the provision of training is clearly one of emergency service volunteering's most positive features, a review of the academic research and recent volunteer reports identified several challenges. These include the need to improve the perceived relevance of the training, the availability and flexibility of the training being provided, as well as a need to be trained in skills that are transferable across different volunteering roles, contexts, and jurisdictions.
 - Volunteers have noted that training can be the most enjoyable activity they experience as a volunteer, and anecdotal evidence suggests that volunteers want their training to be efficient, practical, meaningful, and relevant to their volunteer role (Aitken, 2000). Paradoxically, training requirements have also been identified as one of three major reasons why volunteers leave the service (Woodward & Kallman, 2001), therefore it appears critical that ESOs must be nuanced with respect to training practices, in particular the perceived relevance of the training (Fahey, Walker, & Lennox, 2014; Esmond, 2016).
 - Research has identified a need for providing meaningful opportunities for volunteers to receive training that will help them develop, personally and professionally (McLennan & Bertoldi, 2005). This need has been found to be applicable to both younger and older volunteers. Younger volunteers are interested in gaining new skills that are transferable to career-related working contexts (Francis & Jones, 2012). However, older volunteers may also benefit from having alternative training pathways open to them, to allow them to transition from heavy duty operational roles to light duty or non-operational positions when needed (Kragt, 2019; Kragt et al., 2017).
 - The transferability of skills from one jurisdiction to another is a concern for volunteers, as they have noted their struggles of transferability across different regions or states (Fahey et al., 2003). Therefore, it is recommended that ESOs review their training systems and pathways to allow the transferability of skills across different roles, and across jurisdictions in different regions or states.



2.3. RELATED RESEARCH

Northern Australian bushfire and natural hazard training (Charles Darwin University)

- See <https://www.bnhcrc.com.au/research/hazardtraining>
- “The project, now in its utilisation phase, has developed a training program that builds on the current assets in place, such as the ranger programs, and leads to increasing levels of competence and confidence and in its turn, resilience. The project is a response to north Australian stakeholder concerns that existing training is inadequate for their needs.”



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3. WORK DESIGN

Dr Jane Chong, and Professor Sharon Parker
Future of Work Institute (FOWI),
Curtin University

Work design refers to “the content and organisation of one’s work tasks, activities, relationships, and responsibilities” (Parker, 2014). Work design research is one of the first areas of organisational psychology and management subject to rigorous scientific study. Interest in the topic emerged as a result of working practices that emerged during the Industrial Revolution. At this time, when large numbers of people began to work in factories, Frederick Taylor (2003) introduced the idea of Scientific Management as an efficient way to design work. Under this model, work was broken down into very small tasks, with each small task being allocated to a single worker. The rationale was that it would be easy to train people to do a small task, and then they could perform it with great efficiency. Scientific Management also included the notion that workers do the work whilst managers make the decisions. The net effect was that many people ended up with highly repetitive jobs that have very low levels of decision-making autonomy.

It soon became apparent that such work designs had negative effects – including high levels of worker alienation, stress, absence, and turnover. In response, theories were developed as to how to design work so that it is more motivating and productive (notably the Job Characteristics Model, Hackman & Oldham, 1976) and less stressful (such as the Demand-Control model, Karasek, 1979). A vast amount of research has subsequently taken place to identify what sorts of “work characteristics” constitute a positive work design (see the review by Parker, 2014). Work characteristics such as job autonomy, job variety, and social support have been shown to protect workers from harm and enhance employee wellbeing, not only reducing mental ill health but also promoting a sense of thriving (Schaufeli et al., 2009). The way in which work is designed also affects employee productivity, thereby resulting in significant financial considerations for organisations.

3.1. KEY TRENDS AND DEVELOPMENTS

3.1.1. Research evidence suggests that work design across the world could be improved significantly. However, it is becoming an increasingly recognised topic within Australia particularly in the context of psychosocial risks at work. Work redesign – a process that aims to change the nature and organisation of employees’ work tasks, activities, relationships, and responsibilities – is a useful and increasingly recognised process to mitigate illness while promoting meaningful and engaging work.

Despite the extensive research evidence supporting the relationship between ‘good’ work and outcomes, people do not have universally well-designed jobs and continue to experience deskilled and demotivating work (Parker et al., 2017). On one hand, some people have demotivating jobs that do not draw from their personal skills nor grant them autonomy. Yet, on the other hand, others have



highly stressful and demanding jobs in which they are overloaded. For example, the Eurofound studies of Living and Working Conditions consistently report that workers often have jobs that were deskilled, have low autonomy, or involved too many demands. The way in which jobs are designed has important implications for mental health of people, as well as their productivity.

More recently, research has turned to the question of why work designs continue to be poor for many, despite what is known about the consequences of poorly designed work. Parker and colleagues (2017) highlighted the importance of an integrative approach to understanding the factors that influence how work is designed, taking into consideration multi-level factors such as:

- Global/international: globalisation, market liberalisation
- National: economy, culture, national institutions,
- Occupational: tasks values, professional institutions,
- Organisational: Strategic context, HR practices, operational uncertainty, technology, organisational design, organisational restructuring
- Local work group context: work group composition and interdependence, autonomy, leadership
- Individual context: demographics, personality, motivation, competence, learning

Work design is becoming more recognised among health and safety professionals within Australia (Parker & Griffin, 2014), as being important for workers' mental health (Potter, O'Keeffe, Leka, & Dollard, 2019; Potter, O'Keeffe, Leka, Webber, et al., 2019; Safe Work Australia, 2015). This topic is often discussed within the context of 'psychosocial risks' at work. For example, across the Australian Public Service, median weeks of time off work for psychological claims has increased by 22% from 15.1 to 18.4 weeks of time off work for the five years between 2015-16 to 2019-20 (Comcare, 2020). These alarming statistics further highlight the importance of designing 'good' work that not only mitigates illness that workers face, but also promoting meaningful, engaging work for thriving. Work redesign is one such way in which organisations can help in this regard.

Developed by Australian Research Council Professor Sharon Parker at the Future of Work Institute and drawing from decades of research (Parker et al., 2017), the SMART work design model identifies five key categories of work characteristics that result in meaningful and motivating work that is also healthy: Stimulating, Mastery, Agency, Relational, and Tolerable Demands. These themes are summarised in Figure 3.1 below.

- **Stimulating** work involves using and developing one's skills and abilities to complete the work, performing a wide range of tasks to achieve goals, and requires employees to 'think outside the box' to problem solve at work.
- **Mastery** refers to the degree to which a job provides a clear understanding of what is expected of the employee, provides feedback to employees, and allow employees to understand how their work fits into



the big picture. These work characteristics enable people to master their tasks.

- **Agency** of work refers to the extent to which employees have control over their job. These include control over the timing and scheduling of tasks, flexibility in showing initiative and choosing the methods in which to achieve work goals, and feeling empowered to make judgements and decisions individually.
- **Relational** work allows individuals to experience a sense of support and social contact in their role, such as by being part of a team or community. Relational work also can mean having a positive impact on the lives of others. When work is Relational, individuals meet their need to belong and connect with others.
- **Tolerable demands** relate to the extent to which the demands in the job are manageable. All work involves demands- be these time pressure, emotional demands, or role expectations. But these demands should not be too excessive, nor too chronic. Tolerable demands means, for example, having an adequate amount of time to complete work goals, manageable emotional and mental pressures that create challenge, without unnecessary strain, and work without excessive conflicting expectations.



FIGURE 3 SMART MODEL – A USEFUL TOOL TO OPTIMISE EMPLOYEES’ WORK DESIGN. SOURCE [HTTPS://WWW.THRIVEATWORK.ORG.AU/RESOURCES/WORK-DESIGN/](https://www.thriveatwork.org.au/resources/work-design/) (USED WITH PERMISSION)

The notion of work redesign

Work redesign is a process that aims to change the nature and organisation of employees’ work tasks, activities, relationships, and responsibilities (Knight & Parker, 2019). In turn, these changes can influence employees’ perceptions of work characteristics in a positive manner (Andrei & Parker, 2018). While work redesign can be an unintended outcome of wider system changes, such as the introduction of new technology or other factors described above, it can also be a deliberate strategy by which organisations seek to create meaningful and thriving workplaces.



3.1.2. Future work will make work design more important because technology often does not replace whole jobs, but rather tasks. This means we will need to give much more proactive attention to how to design work with both humans and technology.

There is a near-consensus that new technologies will significantly change the overall workforce structure (Brynjolfsson, Mitchell, & Rock, 2018; Huang & Rust, 2018), with many commentators being especially concerned about the effects of digitalisation on the less skilled workforce (Dellot & Wallace-Stephens, 2017). The digital revolution is rapidly decreasing human input in the performance of routine and easily automated tasks, causing elimination of many tasks within jobs (Eurofound, 2016). It is noteworthy to highlight that it is tasks that will be automated, not whole jobs, such that much work will entail an intense interaction between humans and self-learning autonomous technology (Parker & Grote, 2020). Within this system, human work remains crucial. This means we will need to give much more proactive attention to how to design work with humans and technology. Four strategies proposed by Parker and Grote (2020) include:

- Work design choices need to be proactively considered during technology implementation, consistent with the sociotechnical systems principle of joint optimisation,
- Human-centred design principles should be explicitly considered in the design and procurement of new technologies,
- Organisationally oriented intervention strategies need to be supported by macro-level policies, and
- There is a need to go beyond a focus on upskilling employees to help them adapt to technology change, to also focus on training employees, as well as other stakeholders, in work design and related topics.

3.1.3. Amid the COVID-19 pandemic, there is an increased awareness and, in many cases, necessity, for work to be undertaken remotely and with more flexibility. While flexible working practices can directly increase employees' autonomy, the relational aspects of work (e.g., social support) has been highlighted in recent studies as critical resources to reduce challenges associated with remote working.

Flexible working practices (e.g., telework, flexi-time, remote working) enabled by information and communication technologies (ICT) have grown as new modes of work in the past few decades. Yet, they were not widely accepted or used practice prior to the COVID-19 pandemic (Kossek & Lautch, 2018; Wang et al., 2020). Amid the pandemic, there is an increased awareness and, in many cases, necessity, for work to be undertaken remotely and with more flexibility. From a work design perspective, flexible working practices can directly increase the autonomy that employees have over working time (Gajendran & Harrison, 2007). Moreover, the relational aspects of work (e.g., social support) have been highlighted in several studies as critical resources to reduce various challenges associated with remote working. For example, Vander Elst and colleagues' (2017) study revealed a negative relationship between extent of remote work and perceived social support, which in turn led to employees' emotional



exhaustion. A recent COVID-19 related study further found that social support at work was conducive for alleviating remote working challenges, including work-home interference, ineffective communication, procrastination, and felt loneliness (Wang et al. 2020).

3.1.4. There is an increasing need to make work sustainable through work design to combat the challenges of demographic ageing.

The ageing of the workforce is another important challenge (see *Changing Landscape Literature Review: Demographic Changes* section), that requires attention to work design. Changes in motivational, physical, cognitive, affective, and life demands occur in people as they age. Research in ageing at work has shown the benefits of work adjustments to accommodate these changes on individual workers as well as their teams and organisations. Current evidence suggests the benefits of:

- Improving the ergonomic aspects of work to reduce biomechanical strain,
- Providing skill variety for older workers, and task variety for younger workers; or allocating tasks that rely more heavily on crystallised intelligence rather than fluid intelligence to older workers,
- Allowing flexible work hours so that mature workers can care for grandchildren,
- Providing mentoring opportunities to mature workers so they can help others as when time is seen as more limited, people prioritise emotion-related goals over knowledge acquisition goals (Carstensen et al., 1999; Ng & Feldman, 2010).

3.2. POTENTIAL IMPLICATIONS

- To attract and retain mature workers and to promote successful ageing, ESOs need to be willing to redesign work and work contexts to accommodate changes in people as they age. This includes being aware of the antecedents (or factors) that might shape the ES workforce's job design, such as through the multi-level integrative framework described above (Parker & Andrei, 2020).
- The combined effect of supporting both individual-led and organisation-led strategies are most powerful (Grant & Parker, 2009). Thus, organisation-led work design change can also be complemented by strategies that provide opportunities for employees to redesign their own work, such as via job crafting (Kooij, Tims, & Kanfer, 2015), 'i-deals' (Bal & Boehm, 2019) or proactive work behaviour (Kooij, 2015). It is important also for ESOs to consider the ways in which they allow and support employees to redesign their work. For example, providing a high autonomy environment may increase employees' proactive behaviour and job crafting behaviour (Slemp, Kern, & Vella-Brodrick, 2015).



- Given the vital work carried out by ES workers, it is important they feel engaged and motivated, yet not overly stressed and burdened. Ensuring that work is SMART is a powerful evidence-based way to achieve these outcomes.
- Ensuring that work is SMART will also reduce psychosocial risks and will ensure that the organization is complying with health and safety laws. A good starting point is to assess whether ES workers is SMART by asking workers about their work designs (tools exist to support this activity).
- ES workers are likely to experience large-scale technological change in the forthcoming decade, (e.g. drones, monitoring devices etc, see *Changing Landscape Literature Review: Digital and Physical Technology*), which means it will be important to proactively consider work design questions such as: how does one design work that continues to be engaging and that promotes skill development?; how does one design what tasks are allocated to robots/technology versus humans?; and what modifications to technology are needed to ensure workers retain some autonomy over their work? Too often, work design issues only get discussed *after* the implementation of technology. Furthermore, while technology continues to advance rapidly, the basic tenet of work design theories will remain unchanged. Humans should always be placed at the centre of technological and social systems at work.
- Good work design is not only applicable to paid employees but also to the volunteer workforce. Many ES volunteers not only engage in core emergency services but also spend their time going above and beyond the call of duty. For example, a volunteer firefighter may spend their time and effort training young people or maintaining equipment that are outside of their regular duties. These types of activities or behaviour that go beyond specified role requirements and geared towards fostering organisational goals are known as extra-role behaviours and are important forms of organisational member behaviours that affect organisational performance and survival. A recent study of Austrian and German volunteer firefighters by Schmidhuber and Hilgers (2019) showed that motivating work design was directly and positively related to volunteers' extra-role behaviour.
- The number of mature workers amongst ES workers is likely to increase in the future. It will therefore be important to redesign the work, such as by allowing more flexible working or reducing the physical demands, to accommodate the changes that occur as people age. More implications related to the ageing workforce on ES can be found in the *Changing Landscape Literature Review: Demographic Changes and the Managing an Ageing Workforce* section in this review.



3.3. RELATED RESEARCH

SES Fit for Task project (Human Performance Science, Deakin University, Griffith University, BNHCRC)

- See <https://www.bnhcrc.com.au/research/resilience-hazards/3932>
- This project aims to provide a simple and consistent assessment tool for SES volunteers and agencies across the country that will help inform SES agencies and volunteers of the physical demands required to safely undertake SES tasks. These SES tasks are those which are critical to general SES roles (such as land search, storm and water activities, chainsaw operation) and specialist SES roles (such as alpine rescue, high-angle rescue, swift-water rescue, and urban search and rescue). Research such as this is particularly useful to provide a good fit between volunteer and volunteer tasks, while enhancing the health and wellbeing of SES members and contributing to a strong safety culture within organisations.

Thriving at Work

- Find resources on Thriving at Work and at Home, learn more about our research partnerships and publications at <https://www.transformativeworkdesign.com/>

SMART Work Design

- Learn more about why SMART work design is important, take a SMART work assessment at <https://www.smartworkdesign.com.au/>

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4. DIVERSITY AND INCLUSION

Celeste Young

Victoria University,

and

Dr Aleksandra Luksyte

University of Western Australia Business School

As the fire and emergency sector evolves, changes in climate, technology and workplaces will require a diverse, highly skilled, trained and resilient workforce. The Australasian fire and emergency sector cannot afford to miss out on the skills, ideas and perspectives of a large proportion of the potential workforce, including a diversity of women and others. Ensuring the development and appropriate deployment of the full spectrum of the total talent pool is critical to the growth, competitiveness and future-readiness of our sector.

Gender Balance in Fire and Emergency - Going Beyond it's the Right Thing to Do
(Male Champions of Change Fire and Emergency, 2021, p.7).

Diversity and inclusion are major foci of policy and organisational change within the Australian emergency management sector today. There is strong recognition that the sector needs to better reflect the communities it serves (AFAC, 2016; COAG, 2011).

Many different definitions exist for both diversity and inclusion. Box 4.1 provides definitions selected as most relevant to the emergency management sector by:

- the *Diversity and Inclusion: Building strength and capability* research project. Concluded in 2020, this three-year project worked with D&I practitioners in the emergency management sector to develop an evidence-based framework capable of supporting more effective management and measurement of D&I (Young, et al., 2021, p.6).
- the *Male Champions of Change Strategy* for gender balance in the fire and emergency services.²

The following sections summarise key themes emphasised by two D&I researchers:

- 'From diversity management research with the sector' – these themes and implications are from the *Diversity and inclusion: building strength and capability* project, provided by Celeste Young.
- 'From diversity management research beyond the sector' – these themes and implications are from industrial-organisational psychology research into the way people think and behave at work, provided by Dr Aleksandra Luksyte.

² See <https://championsofchangecoalition.org/groups/male-champions-change-fire-emergency/>



Box 4.1: Diversity and inclusion definitions for fire and emergency services

Diversity | “Diversity is the way we all differ, and how those differences enable, enhance or inhibit the ability of individuals, groups and organisations to achieve individual, collective and/or organisational goals and objectives” (Davidson and Fielden, 2004, p60, cited in Young et al., 2021, p.17).

“All the visible and invisible differences between people in relation to factors, including their social identity – their sex, age, caring responsibilities, cultural background or identity, race, disability, gender identity, sexual orientation and socioeconomic background – and their professional identity – their profession, education, work experiences and organisational role. Diversity is about each of us.” (MCC 2021, p.2)

Inclusion | “represents a person’s ability to contribute fully and effectively to an organisation” (Roberson, 2006, p215). “An inclusive workplace values and uses individual and intergroup differences within its workforce, cooperates with and contributes to its surrounding community, alleviates the needs of disadvantaged groups in its wider environment, collaborates with individuals, groups, and organizations across national and cultural boundaries” (Mor Barak, 2000, p339, cited in Young et al., 2021, p.17).

“Inclusion occurs when a diversity of people (e.g., of different ages, cultural backgrounds and genders) feel valued and respected, have access to opportunities and resources, and can contribute their perspectives and talents to improve their organisation. Inclusion is about all of us.” (MCC, 2021, p.2)

4.1. KEY TRENDS AND DEVELOPMENTS

FROM DIVERSITY MANAGEMENT RESEARCH WITH THE SECTOR

4.1.1. While organisational research on diversity and inclusion is a large and diverse area, there has been an overall shift in emphasis over time from diversity to inclusion, however a focus on both is crucial.

As Young, et al. (2021) explain, in research “the emphasis has moved from diversity towards inclusion, from characteristics towards relationships, and to aspects of diversity embedded in individuals (human diversity) to diversity and inclusion (D&I) in groups (social, cultural, organisational diversity)” (p.15). However, both are crucial. According to Mor Barak (2015), “increasing diversity representation and achieving workforce inclusion is a two-stage process with each stage affecting the other in a circular way”. The first stage is reactive in which organisations “recruit and employ a more diverse workforce”. The second stage is proactive, involving organisations investing “efforts in active diversity management with the aim of enhancing inclusion and fostering organisational effectiveness in their workforce” (p.86). Overall, however, “although the nature and measurement of diversity is being better recognised and understood, the management and measurement of inclusion is still evolving” (Young and Jones, 2020, p.6).

4.1.2. In addition to being a moral imperative, building diversity and inclusion in the emergency management sector is critical for managing human, social and innovation risk associated with hazards, which can enhance overall performance and organisational success.

Empirical evidence is mounting of the widespread benefits of D&I, and of the way that D&I contributes to mitigating a wide range of risks. “The core purpose of D&I practice is to mitigate the associated human, social and innovation risks



with practice and emergency management generally. This includes essential functions such as the provision of a safe workplace, in developing effective diversity and having a safe and secure workforce and community safety. This provides the business imperative for organisations to undertake such work” (Young, et al., 2021, p.31).

Drawing from the empirical research from this project (Young and Jones, 2019a), the *Gender Balance in Fire and Emergency* report outlines eight key areas of risk that are directly addressed by D&I benefits (see Table 1). The highest level of benefits found in this research was for communities: “These included social benefits, such as a reduction of risk, increases in resilience, ability to recover and social cohesion. Economic benefits, such as increased investment, a more integrated and healthier economy and increased business were also identified” (Young and Jones, 2019a, p.21).

The *Gender Balance in Fire and Emergency* report also acknowledges specific human capital and capability benefits arising from D&I that cut across areas such as recruitment and retention, skills, community understanding and organisational capacity to “meet future workforce and organisational challenges” (p.16, see also Table 2). However, most of the wide-ranging benefits are not currently measured by emergency management organisations, particularly those for communities and “most measurement is focused on the diversity aspects within organisations”. There is considerable difficulty in obtaining reliable data to measure D&I benefits and hence to demonstrate the relationships between increasing workforce diversity and improved outcomes (Productivity Commission, 2020; Young, et al., 2021, p.45).



The benefits of diversity and inclusion directly address 8 key risk areas

Risk area	Benefits
Community	<ul style="list-style-type: none"> Improved stakeholder relationships. Stronger, more inclusive interactions between the sector and the community.¹⁰ Improved community participation in decision-making.¹¹ Greater capacity for collective actions and partnerships.
Health and safety	<ul style="list-style-type: none"> Increased workforce well-being.¹² Fewer physical and psychological injuries arising from sexual harassment in the workplace.^{13, 14} Lower insurance premiums.¹⁵
Operational and service delivery	<ul style="list-style-type: none"> More engaged workforce.^{16, 17} Better attraction and retention of personnel,¹⁸ including volunteers.¹⁹ Better leveraging of capabilities.²⁰ Better management of dynamic, complex and uncertain situations. Improved decision-making.^{21, 22} Increased innovation.^{23, 24}
Economic	<ul style="list-style-type: none"> More available resources.²⁵ Greater workforce productivity.^{26, 27} Improved organisational effectiveness²⁸ and performance.²⁹
Public safety	<ul style="list-style-type: none"> Improved community engagement in planning and resilience-building activities.³⁰ More tailored and relevant information provided to communities to inform decision-making. Increased understanding of risks for vulnerable groups during and after emergencies including domestic violence, discrimination and exclusion.^{31, 32} Greater engagement and reduced vulnerability in diverse cohorts.³³
Reputational	<ul style="list-style-type: none"> Improved perception of the sector that reflects the full spectrum of emergency management activities.³⁴ Broader representation of community cohorts in the sector.³⁵ Increased community credibility and trust.³⁶ Attraction of more diverse and highly skilled personnel.^{37, 38}
Political	<ul style="list-style-type: none"> Improved trust between the sector and its communities.³⁹ More ethical and equitable decision-making.^{40, 41} Greater contribution to a fairer and more inclusive society.
Legal and legislative	<ul style="list-style-type: none"> Reduction of legal actions and costs.⁴² Less diversion of resources to manage legal processes.⁴³ Compliance with legislative requirements. Adherence to human rights and equal opportunity laws.

Note: This table has been adapted from the risk categories identified in the Bushfire and Natural Hazards Cooperative Research Centre research report, *Risky Business: Why Diversity and Inclusion Matter* (Young & Jones, 2019, pp. 35–37).

TABLE 1: THE BENEFITS OF DIVERSITY AND INCLUSION DIRECTLY ADDRESS EIGHT KEY RISK AREAS (SOURCE: MALE CHAMPIONS OF CHANGE FIRE AND EMERGENCY, 2021. ADAPTED FROM YOUNG AND JONES, 2019A, P.35-37).



Human capital and capability



The rationale	What will success look like?
<ul style="list-style-type: none"> There is higher attraction and retention of diverse and highly skilled employees and volunteers. The workforce has a broader skill base, more varied experience and greater output. New people have an easier transition into the sector or organisation. There is greater recognition and value placed on non-response capabilities, including community engagement. The workforce has a greater understanding of the issues and challenges for diverse and/or underrepresented groups. Organisational capacity, capability, knowledge and learning opportunities are increased. Organisations have the greater ability to meet future workforce and organisational challenges. 	<ul style="list-style-type: none"> Individuals are more engaged and everyone feels like they belong, and that individual uniqueness is valued. Organisations have strong, sustainable and resilient workforces. Our sector is recognised as an employer of choice for all members of the community. The workforce represents the communities in which they operate.

TABLE 2: HUMAN CAPITAL AND CAPABILITY BENEFITS OF D&I (SOURCE: MCC 2021, P. 16).

4.1.3 Central workforce attributes, skills, and capabilities that enable D&I have been identified with D&I practitioners in the emergency management sector.

Of direct relevance to workforce planning, specific workforce capabilities are needed to support effective D&I activities. A workshop with D&I practitioners in the emergency management sector identified the most important attributes, skills and capabilities (see Table 3). Of these, empathy was the attribute (“the raw clay from which organisations build capabilities”) given most importance by workshop participants despite rarely featuring in D&I frameworks (Young and Jones, 2019a, p.23).

	Attributes	Skills	Capabilities
Most allocated (>2)	Empathy Emotional intelligence Integrity Trustworthy	Communication Listening	Agility and adaptiveness Collaborative
Greatest importance (>2)	Empathy Emotional intelligence Inquisitive	Listening Reflective	Agility and adaptiveness Cultural competency

TABLE 3: MOST ALLOCATED AND MOST PRIORITISED ATTRIBUTES, SKILLS AND CAPABILITIES FROM THE WORKSHOP (SOURCE: YOUNG AND JONES, 2019A, TABLE 1, P.6).



FROM DIVERSITY MANAGEMENT RESEARCH BEYOND THE SECTOR

4.1.4 Although formal discrimination is legally prohibited, other forms of discrimination, which are more subtle, covert, and interpersonal in nature, are still prevalent and influence work experience of demographically and culturally diverse employees and volunteers.

Formal discrimination, or differential access to and distribution of employment resources and outcomes to employees based on their demographic background such as sex, age, race, is legally prohibited, it can tarnish organisation reputation via lawsuits (James & Wooten, 2006) and is detrimental to the well-being of employees who experience it (Jones, Peddie, Gilrane, King, & Gray, 2016). Despite these costs, discrimination is still prevalent, yet, it has taken other, subtle, interpersonal forms, wherein employees of certain demographic groups experience differential treatment in social interactions (Hebl et al., 2002). Because this type of discrimination is interpersonal in nature, it can be often overlooked and not recognised, yet due its interpersonal and subtle nature can be particularly detrimental for employees' well-being and productivity. These covert forms of discrimination manifest in many employment stages and work outcomes.

Research on selective incivility also shows how men and women and racial minorities may experience heightened levels of rude, condescending, and uncivil treatment or interpersonal discrimination (Cortina, Kabat-Farr, Leskinen, Huerta, & Magley, 2013). Such instances of selective incivility are particularly prevalent in male-dominated types of jobs and industries such as lawyers and attorneys, wherein women and racial minorities do not fit the prototypical worker image, who is in general is more associated with men than women (Kabat-Farr, Settles, & Cortina, 2020).

4.1.5 The existence and prevalence of prescriptive and descriptive stereotypes, e.g., gender, race and age stereotypes, explain why the same work behaviours displayed by employees from different demographic and cultural backgrounds receive different outcomes.

Gender stereotypes explain why men and women tend to receive differential outcomes for displaying the same work behaviour such as leadership, innovation, negotiations, and helping. For example, women and men who innovate, assert themselves during negotiations, or who lead a team at work do not receive the same outcomes for engaging in the same work actions (Amanatullah & Tinsley, 2013; Badura, Grijalva, Newman, Yan, & Jeon, 2018; Luksyte, Unsworth, & Avery, 2018). This is because all these behaviours - being innovative, leading others, defending self-interests, are seen as stereotypically masculine activities. Because of these stereotypical expectations, women who engage in these prototypically masculine activities violate stereotypical expectations of who should innovate, lead, aggressively negotiate, and thus they get penalised for violating these expectations.

Race stereotypes also influence the work outcomes and work experience of racially diverse employees. For example, because of race stereotypes, in an American context, Black employees who showed up late for their work received



lower performance evaluations and were less likely to be promoted than White counterparts displaying the same tardiness behaviours (Luksyte, Waite, Avery, & Roy, 2013).

Age stereotypes also lead to stereotypical portrayals of younger employees as lacking patience and wisdom, whereas older workers are viewed as inflexible and lacking innovation (Petery et al., 2020). Because of these age stereotypes, teams that consist of both older and younger employees may experience heightened misunderstandings, particularly when their age is made salient, and particularly for tasks that are stereotypically associated with either younger (e.g., physically demanding) or older (e.g., patience requiring) age (van Dijk, Meyer, van Engen, & Loyd, 2017). (See also section on Managing an Ageing Workforce for more on this).

4.1.6 Eradicating discrimination and increasing diversity and inclusion, requires organisations to integrate the differences of their demographically and culturally diverse employees into all organisational processes and decision making, and learn from these differences.

Demographic and cultural diversity can bring about unique perspectives; it can also spark conflicts. Given the increasing diversification of the population, and hence the workplace, it is important to know how and when diversity is beneficial for everyone (Dwertmann, Nishii, & van Knippenberg, 2016). Recent developments in the diversity management literature discusses the 'bankruptcy of the main effects', meaning that having a culturally and demographically diverse workforce does not automatically lead to stereotyping and discrimination (van Dijk et al., 2017). Rather, *depending on how managers approach, manage, develop, and integrate their diverse labour force*, diversity can be either a source of creativity or a source of conflict.

One way to leverage diversity to improve creativity is through the development and promotion of positive "diversity climate", wherein all employees feel included, supported, and integrated irrespective of their demographic differences. Notably, these forms of diversity climate (synergy) – wherein diverse perspectives are encouraged, and diverse ideas are listened to – proved beneficial for work experiences and creativity of employees with ranging organisational tenures (Richard, Avery, Luksyte, Boncoeur, & Spitzmueller, 2019). Being inclusive of, and attentive to, difference workplace diversity climates proved beneficial for employees of various ages (Li et al., 2021). This is because in workplaces with strong diversity climates, employees can overcome the negative impact of categorising others as in- and out-group members and focus on finding deeper-level similarities. In favourable diversity and inclusions climates, employees from various demographic backgrounds (e.g., younger and older) are better able to build social and human capital, which in turn results in improved organisational performance (Li et al., 2021).



4.1.7 Reasons why women and younger volunteers may be less likely than older men to volunteer in the emergency services include: role stereotypes or assumptions, limited awareness around how technology could make tasks more accessible, limited awareness around the breadth of roles available, and stereotypes around emergency service culture.

The emergency services volunteer workforce is characterised by relatively older memberships, with a high proportion of men. There are many reasons why women and younger volunteers may be less likely than older men to volunteer for emergency services. First, occupational stereotypes or assumptions about how a prototypical emergency services volunteer should 'look' like (Batty & Burchielli, 2011) could prevent women and younger people from volunteering for these roles. Stereotypically, emergency services volunteer roles are more associated with older men than women. These roles include physically demanding tasks that require experience (which one would get with age) such as, for example, fixing damaged roofs, four-wheels driving, chainsaw, cliff/ gorge rescues, among others (Silk, Lenton, Savage, & Aisbett, 2018).

Second, prospective volunteers from minority groups (such as females) may also be unaware of how technology could make it possible for them to partake in even the most physically demanding tasks. For example, volunteers can use drones for search-and-rescue, especially after natural disasters and in hazardous areas, to help navigate tricky terrains and help rescue teams locate victims in hard-to-reach areas (Camara, 2014; Karaca et al., 2018). Such use of technology makes prototypically masculine volunteer tasks more accessible to female and older volunteers. Younger volunteers and volunteers from other cultural and racial backgrounds may also be unaware of these technological changes, which should make volunteering more attractive for younger people, who are stereotypically are more technology savvy than their older counterparts (Posthuma & Campion, 2009).

Third, female and younger volunteers might not be aware of the breadth of roles they can perform in emergency services, not all of which require the same level of physical strength, dexterity, and maturity. In particular, emergency services volunteers spend lots of their time on training and emergency preparation.

Fourth, stereotypes may exist not only about a prototypical emergency services' volunteer, but also about emergency services culture. In our survey, some female and younger volunteers described emergency services culture as being "old boys", "military" or "top heavy, top down, military style operation". Not surprisingly then, prospective female and younger volunteers might perceive that they would not be welcome, accepted, and given their chance in a group mostly constituted of older men and in a culture that is not inclusive of culturally and demographically diverse volunteers.



4.2. POTENTIAL IMPLICATIONS

FROM DIVERSITY MANAGEMENT RESEARCH WITH THE SECTOR

- The structures and cultures of the emergency management sector require transformational change in order to realise the benefits and performance improvements that come with greater D&I. “The hierarchical culture in many areas of the [emergency management sector ...] presents a particular challenge to diversity, which needs flexibility and agility, and transformational leadership at all levels of an organisation to succeed” (Young, Pyke, Maharaj, Rasmussen, & Jones, 2018, p.25). The D&I implementation process is therefore “a form of social transformation” in which “people need to be guided through stages of awareness, acceptance, uptake and action until a critical mass is achieved that changes the status quo” (Young and Jones, 2020).
- The research with EM organisations found common aspects that support effective D&I programs. These include (Young, et al., 2021, p.9):
 - “Ensuring there are safe spaces where difference is welcomed and accepted, where and how the terms of inclusion can be negotiated, and concerns can be addressed.
 - Organisations need an authorising environment (structures, governance and processes) and a mandate to operate (social licence) if programs are to be effective. Upper-level advocacy, support and commitment to the D&I agenda over the longer term is critical.
 - Ensuring that people who are undertaking and leading activities have the appropriate skills and knowledge to manage proactively and effectively. Authentic actions are needed to build trust in the longer term.
 - A pragmatic approach where organisational champions and leaders are able to respond, capitalise on and leverage opportunities as they arise.
 - To look beyond the organisation itself and understand where the interactions between the community, EMOs and other institutions (such as government), need to be managed and who needs to manage these.
 - The development of collaborative and individual narratives that take the conversation ‘beyond the numbers and quotas’ to tell stories that connect people to each other and humanise risk so that it is understood and valued.”
- Many of the most important workforce attributes, skills and capabilities needed to support D&I implementation are ones that are not traditionally emphasised or prioritised in EMOs. Young and Jones (2019a) note that “traditionally EMOs have focused on skills related to effective response to an array of hazards. [Their workshop with D&I practitioners] reinforced the need



to develop skills and capabilities that reach beyond the usual technical and generic skills sets currently in use” (p.6).

- A key output of the D&I project is a practical framework tailored to the emergency management context to help organisations better manage and measure diversity and inclusion programs and activities, and to build more diverse and innovative work cultures for the future (Young and Jones, 2020). The framework “aims to provide a basis for practitioners to address these issues through a strength-based approach, which builds upon current practice and expertise in the sector” (p.6). It adopts systemic approach, linking “three key areas through which D&I is managed and measured”: programmatic continuous improvement, strategic processes of change, and inclusive growth through bottom-up engagement.

FROM DIVERSITY MANAGEMENT RESEARCH BEYOND THE SECTOR

- In general, people use stereotypes as mental shortcuts particularly in situations when they lack time and motivation to process information that does not fit their preconceived notions. Managers can be particularly susceptible to stereotypical thinking if they lack motivation or time to make decisions free of stereotypes. Hence, it is critical to increase awareness amongst managers of the prevalence of these stereotypes and of their potential impact on our decisions and subsequent important employment outcomes. It is also critical to talk about these stereotypes and ways to proactively address them with the wider workforce, so that employees and volunteers become more aware of these stereotypes and where and how they operate. For example, some volunteer leaders expressed hesitance to discipline other volunteers out of fear of appearing racist – a concern that maybe minimized if there are specific behaviour-based criteria for evaluation of volunteer work (Young & Jones, 2019b).
- For the future, there is a need to implement actionable steps that reinforce climates of inclusiveness in emergency services, and to ensure that women, younger volunteers, volunteers from diverse cultural backgrounds are integrated into decision-making, and promoted and nominated for leadership positions. Reinforcing the findings of the research conducted with the emergency management sector, organisational psychology also emphasises that building and promoting diversity and inclusion climates is not just beneficial for minimising stereotype and discrimination, but also for increasing opportunities to learn from and integrate differences, and for improving organisational performance (e.g., Gagné et al., 2019).
 - To support greater diversity of volunteers into the emergency services, it is important to increase awareness of the stereotypes of a prototypical emergency services volunteer and proactively challenge them during all the processes of volunteering. This can be achieved, for example, by nominating and promoting to visible roles and challenging tasks volunteers who do not fit a prototypical profile of an ideal volunteer. Further, it might entail modifying the volunteer role and expectations to address different needs and restrictions of different



volunteers, for example, providing childcare arrangements for those with childcare responsibilities.

- In the future, there is a need to better balance directive (e.g., crisis driven, command and control) leadership styles with more inclusive leadership styles. By exercising directive leadership, ensure emergency services volunteers effectively respond to crises situations. Yet simultaneously they will need to embrace inclusive leadership. However, the COVID-19 pandemic has created unique challenges for leaders, and there is a need to be cautious of relying too heavily on directive, leadership due to the organisational challenges created by the pandemic. Research shows that organisations tend to respond to external threats such as financial meltdowns or global pandemics with actions that reflect rigidity (Staw, Sandelands, & Dutton, 1981). In particular, they implement directive leadership, which discourages participation, tightens control, and centralises decision-making. COVID-19 has created a unique challenge in that to effectively operate during the pandemic, leaders may take on a more directive style. Ironically, this runs the risk of slowing down progress on making emergency management culture more inclusive.

4.3. RELATED RESEARCH

Diversity and Inclusion: Building strength and capability project (Victoria University, BNHCRC)

- See <https://www.bnhcrc.com.au/research/diversityinclusion>
- “The project aims to assist the understanding and practice of D&I in the EMS through the identification of current measurement, strengths, barriers, needs and opportunities in emergency management organisations (EMOs) and the community.”

Indigenous initiatives – research projects (various universities, BNHCRC)

- See <https://www.bnhcrc.com.au/driving-change/indigenous-initiatives>
- “While there may be differences in the ways that Aboriginal and non-Aboriginal people understand the world, these differences can create opportunities to build strong relationships and find mutual benefit in overlapping interests. The Bushfire and Natural Hazards CRC research in the Indigenous Initiatives theme has identified ways to make the most of those opportunities without losing sight of who we all are. This takes recognition, respect and trust.
CRC researchers have investigated Indigenous-driven interests and initiatives in building community resilience as a foundation for more effective relationships between communities and emergency management agencies.”

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5. MANAGING MENTAL HEALTH & WELLBEING

Associate Professor Karina Jorritsma and Dr Jane Chong
Future of Work Institute (FOWI),
Curtin University

Mental illness and ill-health are increasingly important topics of concern within workplaces. It is estimated that, at any one point in time, one in six working age people will be suffering from mental illness (mostly commonly depression and anxiety), with a further one in six suffering from symptoms associated with mental ill-health (e.g., worry, sleep problems, fatigue) affecting their ability to function at work (Harvey et al., 2014). The COVID-19 pandemic, coupled with recent unprecedented natural disasters (e.g., the Black Summer Bushfires), have only exacerbated this issue, doubling the prevalence of mental health issues in Australia in the early months of the pandemic (Fisher et al. 2020) and increasing risks of working age adults developing poor mental health in the future.

Mental illness has become the leading cause of sickness, absence, and long-term work incapacity in Australia, and is one of the main health-related reasons for reduced work performance (Harvey et al., 2014). Economic analyses estimate the cost of mental health conditions to Australian businesses to be between \$11 to \$12 billion dollars each year through absenteeism, reduced work performance, increased turnover rates, and compensation claims (National Occupational Health and Safety Commission, 2003; LaMontagne et al., 2011). As such, workplace mental health is a major concern to many, including health professionals, businesses, and policy makers (Harvey et al., 2014).

Whilst the academic study of the impact of workplace factors on mental health is not new (see e.g., Parker et al., 2017), following rising workers' compensation claims (Safe Work Australia, 2021), a series of public reviews (e.g., Boland, 2018; Productivity Commission, 2020), commissioned reports (e.g., Harvey et al, 2014), and national studies (Dollard et al., 2012), there has been increasing public awareness that workplaces can play an important and active role in worker mental health - not only to support workers experiencing ill-health, but also in maintaining and promoting the mental health and wellbeing of their workers.

In one of the first major Australian commissioned reviews in this space, researchers at the University of NSW and Black Dog Institute extended on what had previously been a primarily public health and clinical lens applied to worker mental health (i.e., individual treatment and ill-health), to widen the lens to incorporate the impact of workplace conditions on worker mental health (Harvey et al, 2014; see also LaMontagne et al., 2014 for commentary on this integrated approach). They used the term “mentally healthy workforce” to combine these lenses, in which *“a mentally healthy workplace refers to one in which psychosocial risks are recognised and suitable action is taken to prevent or minimise their potential negative impact on the mental health of workers. At the same time, protective or resilience factors are encouraged and promoted”* (Harvey et al., 2014, p.12). Importantly, this definition proports that **good** mental health encompasses much more than the mere absence of poor mental health or related stressors.



What contributes to a person's mental health is a complex issue, however, findings from several systematic reviews have identified key risk and protective factors that contribute to a mentally healthy workplace, including:

- **Work design:** how a job is designed including level of demands, level of control in the work environment, support and resources provided, level of work engagement, characteristics/nature of the job, and exposure to trauma (see also Section 3 - Work Design)
- **Team factors:** availability of support from colleagues and supervisors, quality of interpersonal relationships, effective leadership, and availability of manager training.
- **Organisational factors:** how change is managed with an organisation, overall climate of the organisation including psychological and physical safety environment, perceived organisational support, how work is recognised and rewarded, and the extent to which fairness or justice is perceived within the organisation.
- **Home/work conflict:** the degree to which conflicting demands from home interfere with work.
- **Individual factors:** genetics, personality, early life events, cognitive and behavioural patterns, mental health history, lifestyle factors, and coping style.

As outlined in the Harvey et al (2014) review, and several others since, to minimise the impact of known workplace risk factors and maximise the impact of potential protective factors, it is integral to take an integrative view. That is, strategies are needed at the individual, team, and organisational levels in addition to the consideration of primary, secondary, and tertiary prevention interventions.

Many within the emergency services, particularly first responders, encounter highly challenging working conditions and regular exposure to traumatic experiences, including both direct and vicarious trauma. The Royal Australian and New Zealand College of Psychiatrists (2018) concurred that most first responders are exposed to trauma repeatedly:

Exposure to trauma or 'critical incidents', such as disasters, interpersonal violence, traffic accidents, and combat, forms an important part of the work of first responders and emergency service personnel. Research on Australian firefighters provides a valuable snapshot of trauma exposure in emergency services. A study on South Australian metropolitan firefighters found that 76% of the workforce reported exposure to 10 or more critical incidents throughout their career, and almost all those involved reported witnessing death on the job.

Based on the Intergovernmental Panel on Climate Change Fifth Assessment Report, Mach et al. (2016) identified the growing risks of wildland fire and other types of natural hazards associated with climate change. The 2018 State of the Climate report noted that 'there has been a long-term increase in extreme fire weather, and in the length of the fire season, across large parts of Australia' (CSIRO & Bureau of Meteorology, 2018, p. 2). These more demanding conditions (further elaborated in the *Changing Landscape Literature Review: Changing*



Risk) are likely to have an adverse impact on the mental health and wellbeing of ESO personnel.

But what we also see is that it is often not just exposure to incidents that is the problem. Other psychosocial factors within a workplace also have important influences on the mental health of employees, as noted above and highlighted in a recent report by Beyond Blue. Beyond Blue's *Answering the Call* is the first national survey of the mental health and wellbeing of personnel in Australian police and emergency services, with an aim to provide a detailed and accurate picture of mental health issues affecting the police and emergency services workforce (Beyond Blue Ltd, 2018). Addressing workplace mental health and wellbeing from an employees' perspective is paramount within the emergency management sector. Below, we highlight several key trends identified from research and practice that may be relevant for the future ES workforce.

5.1. KEY TRENDS AND DEVELOPMENTS

5.1.1. There is increasing public awareness of the links between mental health and work, which in turn is requiring organisations to respond.

Public awareness of the importance of good workplace mental health and wellbeing is growing, as is the moral, societal, and business case for improving it. Indeed, mental health and wellbeing are increasingly topics of discussion across the legal, medical, and policy sectors in recent years. Previously, the Productivity Commission (2020) highlighted that less attention was given to psychological health and safety compared to physical health and safety. More recently, certain areas of psychological risk in the workplace have received growing attention, such as workplace bullying and excessive working hours. There is literature highlighting specific ongoing mental health and wellbeing concerns for women (e.g., Eriksen, 2016; 2019) as well as North American research by Jahnke et al. (2019) which found a dose-response relationship between the severity of the participant's discrimination/harassment and the odds of poor mental health symptoms. Additionally, there is an increased trend to emphasise employers' responsibilities to proactively manage psychosocial risks inherent within their organisation (Boland, 2018; Safe Work Australia, 2019).

The COVID-19 pandemic has cast further public light on the links between mental health and work, and demonstrated the consequences for individuals, workplaces, and the economy, when worker wellbeing is put at risk. Indeed, many organisations have, during the pandemic, been forced to prioritise not only members' physical health, but also worker mental wellbeing as a matter of business survival, when protecting workers' health and reducing stress became critical to operations (Deloitte, 2021). Supporting this, a recent survey by Superfriend (2020) revealed that, throughout the pandemic in 2020, there was a noticeable increase in tangible actions shown to improve worker mental health.



5.1.2. Shifting perspectives around supporting workplace mental health: the move from individual, reactive approaches to systemic, integrative, holistic, and proactive approaches.

With work being found to play a critical role in the development, expression, and maintenance of individuals' psychological health (Harvey et al., 2014), organisations are ideally placed to improve and nurture workers' health and wellbeing for the benefit of the individual, the organisation, and the broader community. Yet, despite the growing moral, societal, and business case for improving workplace mental health and wellbeing, there is still a major gap between best practice advocated by academic literature and actual organisational practice (Boland, 2018; Productivity Commission, 2020). For example, the Mentally Healthy Workplaces in NSW benchmarking tool identified that less than 20 per cent of organisations are currently taking effective actions to improve the mental health of workers (Safe Work NSW, 2018). Some broad challenges related to addressing mental health issues in the workplace include (Parker, Jorritsma, & Griffin, in press):

- The dominant discourse around mental health is still focused on reactive responses to the mental health problems of individuals, with organisations often reacting only when workers are exhibiting signs and symptoms of distress.
- Many organisations also focus on the individual as the primary target of intervention (e.g., resilience training), inadvertently focusing on responsibility of mental health and wellbeing almost entirely on the worker. However, mental health and wellbeing at work is the joint responsibility of the individual and the organisation.
- Stemming from legal requirements to protect workers from harm, organisations tend to adopt a compliance-oriented focus on removing risk rather than ensuring that work is well-designed and promotes positive mental health.
- Related to the point above, there is a predominance of focus on mental ill-health rather than on promoting health and well-being. Yet, the absence of mental ill-health does not define an individual as mentally well.
- There is generally a poor understanding or neglect of the business benefits of promoting mental health and well-being.
- There is a tendency to adopt a piecemeal and reactive approach to addressing mental health and wellbeing in the workplace, rather than an integrated and proactive approach that aligns organisational strategies.

To address these shortcomings of current practice, various approaches have been taken (Boland, 2018; Productivity Commission, 2020). One such approach has been to provide organisations with practical evidence-based frameworks and "how to" guides to mature practice. The Thrive at Work initiative is one such example. In consultation with industry and extensive evaluation of academic literature and professional practice, the Thrive at Work framework provides evidence-based strategies to help address the full spectrum of mental health, including mitigating illness, preventing harm, and promoting thriving (Parker, et.



al, in press). Other initiatives include guidance documents to help organisations meet their duty of care (e.g., the Canadian National Standard: Psychological Health and Safety in the Workplace, Mental Health Commission of Canada, 2018), Codes of Practices (e.g., FIFO Code of Practice, DMIRS 2019), industry blueprints (e.g., Minerals Council of Australia Mental Health Blueprint, 2015; the Australian Public Service Mental Health Capability Project, Department of Industry, Science, Energy and Resources 2021) and industry specific guides, including that for first responder organisations in Australia (Beyond Blue, 2018). As these initiatives and guidance documents proliferate, it is anticipated that practice should mature, and it will become more commonplace (and required) that organisations adopt more holistic, and integrated, proactive and evidence based mental health strategies that focus on recovery, prevention of harm and promotion of worker wellbeing.

5.1.3. Technological advancements are both helping and hindering workers' mental health and wellbeing through transforming work.

Technological advancements have helped and will likely continue to help improve working conditions through the automation of mundane tasks, thereby allowing humans to focus on more meaningful, stimulating, enriching, and creative tasks which are in turn stimulants for experiencing well-being and thriving at work. On the other hand, technology also has the potential to de-enrich job roles, decrease wages, and increase work intensity and demands (e.g., being constantly connected to work and unable to 'switch off'). Technological changes are also increasingly blurring the lines between work and nonwork- a defining characteristic of the early 2000s (Bliese et al., 2017). The relationship between changes such as working from home and mental health is complex and requires consideration of broad system factors to optimise the effects of such flexible practices on workers' health. In their review of mental and physical health effects of working from home, Oakman and colleagues (2020) emphasised the importance of formalised policies that consider work-home boundary management support, role clarity, workload, performance indicators, technical support, facilitation of co-worker networking, and training for managers. Johnson and colleagues (2020) reviewed the effects of technology-driven changes to the workplace and mental health and well-being. First, they considered *how we work*, with a focus on changes driven by automation and advances in technology in the workplace. Second, they considered *where and when we work*, with a focus on flexible work arrangements facilitated by changes in telecommunications technology. The main themes are summarised in Figure 5.

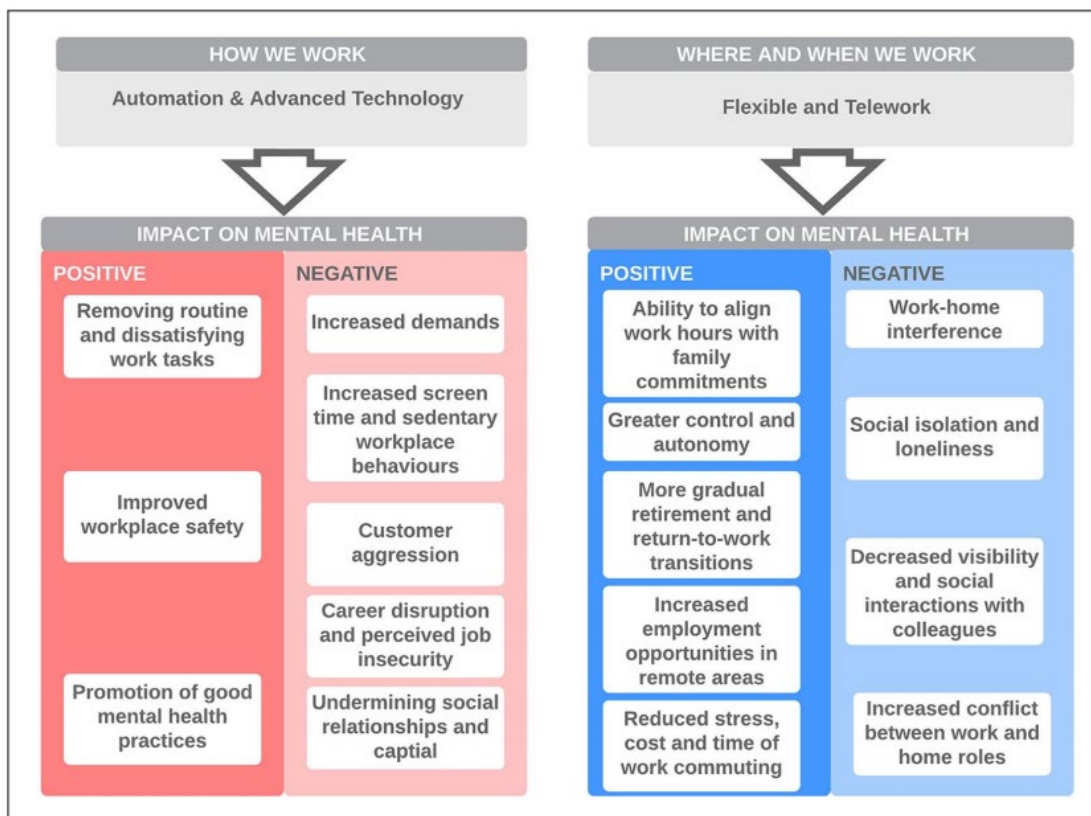


FIGURE 4: THE EFFECTS OF TECHNOLOGY-DRIVEN CHANGES TO THE WORKPLACE AND MENTAL HEALTH AND WELL-BEING (JOHNSON ET AL., 2020, FIGURE 3, P.411, USED WITH PERMISSION.)

5.1.4 An increased integration of physical, physiological, and psychological data in the future are likely to capture broader ranges of work stressors and strains.

Advances in sensor technology are making the collection of physical, psychological, and physiological data streams increasingly feasible in applied settings (Bliese et al., 2017). Leveraging these technologies, research has explored the use of artificial intelligence in the diagnosis of mental illness as an aid for clinicians (Graham et al. 2019). In an experimental study, Chandler and colleagues (2019) showed that a mobile app was as effective as clinicians at diagnosing severe mental illness among a group of people from the United States and Norway. Whilst they will not remove the need for clinicians, these technological developments may help in facilitating rapid diagnosis and assessing programs in the treatment process (Productivity Commission, 2020).

With more data points on a broad range of work stressors, signs, and symptoms (e.g., physical exertion, ambient temperature, sleep quality, endocrine markers), there will also be new opportunities to significantly advance our knowledge of the stress process. In applied settings, organisations are expected to become better equipped with more time-sensitive data to also monitor and recognise signs and symptoms of stress. This is important due to features of modern work including increasing unpredictable patterns of activity and rest, intensification of work, and managing complexity and uncertainty. Technology is also increasing around-the-clock activity in many industries, placing more emphasis on the human capacity to sustain performance over longer periods of time. As such, research in fatigue management is increasingly needing to take a more complex



work-life lens – adopting an integrated approach towards work, non-work, and sleep (Crain et al., 2018). An interesting finding in this space is that there is evidence suggesting that microbreaks during work (e.g., nutrition intake and social interactions) can decrease the effects of work demands on end of workday negative affect (Kim et al., 2017). Integrating such research findings on fatigue management coupled with technological advancements in recognising signs and symptoms provide the opportunity for organisations to better design optimal work/rest schedule designs, especially in work environments that require high and sustained levels of performance.

Box 5.1: Applied example, Australian Defence Force

The Australian Defence Force (ADF) has launched a new app and online platform called Headstrength. This app allows uniform and civilian staff users to anonymously record and track their mood, take brief assessments, and access 260 resources to help users better manage their mental health and wellbeing. The ADF is able to collate this anonymous data so that it can track trends in the mental health of the workforce and whether particular initiatives may be having the desired effect.

See <https://www1.defence.gov.au/adf-members-families/health-well-being/services-support-fighting-fit/mental-health-online/web-and-mobile-apps>

5.2. POTENTIAL IMPLICATIONS

Given the challenging nature of emergency services work, it may be that naturally resilient people are more likely to gravitate towards this work. Yet, the nature of emergency services work means first responders are likely to be exposed to difficult situations and potentially traumatic events. Emergency service personnel were identified in the occupations with the highest rate of claims for mental health conditions (Beyond Blue, 2018).

Many ES roles come with a range of known work stressors, including long hours on shift-work schedules which may impact people's access to support and interaction outside of work, leading to social isolation and relationship difficulties impacting their mental health. Furthermore, compared with the general adult population, employees in the police and emergency services sector had substantially higher rates of psychological distress, probable PTSD, anger and impulse control problems, and lower levels of positive wellbeing (Beyond Blue Ltd, 2018). There is also gaining interest around the concept of moral injury, which refers to the psychological, social, and spiritual impact of events involving betrayal or transgression of one's own deeply held moral beliefs and values occurring in high stakes situations. However, future research in this area particularly in the ES sector is in its infancy (see a recent Australian book edited by Tom Frame (2020) *Moral Challenges: Vocational Wellbeing among first responders* for an initial discussion around the topic). Given the complex range of factors that affect ESOs members' mental health and wellbeing, each organisation should take the time to develop a clear understanding of their specific risk profile and management strategy (Beyond Blue).

Research in mental health and wellbeing discussed above has implications for ES workforce, which we highlight below:



- Currently, the focus on workplace mental health and wellbeing lags behind that on physical health and safety (Productivity Commission, 2020). As legal frameworks change to rectify this, and the impact of work on the workforce's mental health and wellbeing becomes more publicly known, there will be an increasing need for ESOs to understand and prevent psychosocial risks within the workplace. This will include involving deeper dive considerations from a wider systems and preventative perspective such as work design and psychosocial safety climate in the workplace. For example, Bancroft's (2019) and McFarlane et al.'s (2018) research emphasises that in addition to potentially traumatic events, more general operational and organisational factors are significant stressors for firefighters. Bancroft (2019) observes that the more routine operational and organisational factors should be more able to be modified than attendance at potential trauma-related events.
- Changing technology also has workplace mental health and implications for the emergency service workforce. Examples such as advances in big data accompanied by an increasing amount of cross-agency data-sharing situations, remote team challenges, and technological changes for 000 call takers (e.g., Next Generation 000, see: Review of the National Triple Zero (000), Department of Communications, 2015) all lead to increased cognitive complexity for the emergency service workforce. High demands stemming from such complexity coupled with low control in part by automation of technology will have implications on the workforce's mental health and wellbeing. As such, as technological advances continue to change the emergency management landscape and work, it is imperative to develop or modify work systems while including workers' mental health and wellbeing as a primary consideration.
- There are many levels where ESOs can target interventions. Using an evidence-based framework (e.g., Thrive at Work framework), organisations can adopt an integrated, strategic, and proactive approach to addressing mental health in the workplace. For example, resilience training has been shown to improve personal resilience and represents a useful means of developing mental health and subjective well-being in employees (Robertson et al., 2015). However, rather than focusing just on individual strategies, a more effective and proactive strategy can include team and organisational factors, such as work redesign and interventions to encourage social support among team members.
- A key finding from the Beyond Blue (2018) Phase 2 report is that supportive and inclusive workplace cultures that enable regular discussions about work-related experiences and which effectively manage the emotional demands on personnel have lower rates of PTSD and psychological distress. Moreover, poor workplace practices and culture is as debilitating for emergency service personnel as is exposure to trauma.
- As recommended by Johnson and colleagues (2020) in their review of technological implications on workplace mental health, ESOs could consider hiring cognitive, organisational, and human factors psychologists in their workforce to design and implement initiatives which promote more 'mentally healthy' use of technology at work.



- As highlighted in the Recruitment and Selection and Changing Nature of Work sections, there is increasing competition for talent and associated with it, an increasing need for organisations to be seen as an employer of choice to remain competitive. Given the increased awareness of mental health and wellbeing, employees are more likely to look for workplaces that support their mental health and wellbeing. As such, to remain attractive to potential employees and volunteers, it may be beneficial for ESOs to incorporate relevant workplace mental health strategies as part of their recruitment campaign.
- Although mental health literacy levels have generally increased in recent years, many individuals still do not know what types of emotional or behavioural symptoms may indicate mental health issues, when to seek help, and what types of help are effective for different types of conditions (Reavley & Jorm, 2011). As Lawrence and colleagues highlighted in their findings on the national survey of mental health and wellbeing of police and emergency services: *“Providing evidence-informed education and access to resources for all personnel, that focus on addressing mental health literacy should be a key consideration by all police and emergency service agencies. This should focus on increasing the understanding of the signs and symptoms of mental health conditions and strategies to protect mental health and enhance wellbeing across the career life cycle”* (Beyond Blue, 2018 p.185). As research continues to progress in this area, there are significant opportunities for ESOs to incorporate early detection strategies such as this, as well as better preventive strategies (e.g., work design) and protective factors (individual level e.g., resilience; Wild et al., 2020) into managing the mental health and wellbeing of their current and future workforce.
- Related to the point above, self-stigma associated with mental health appears to be an ongoing issue. The Beyond Blue study found that, although individuals were supportive of colleagues who may be experiencing mental health issues, they were more worried about how others may regard them or felt unable to speak openly about their personal circumstances and feelings. This suggests a double standard in that individuals were much more considerate of their colleagues' mental wellbeing than their own, thereby highlighting the importance of providing evidence-informed education in this regard.

5.3. RELATED RESEARCH

National mental health and wellbeing study of police and emergency services (University of Western Australia, Roy Morgan Research, Beyond Blue, BNHCRC)


- See <https://www.bnhcrc.com.au/research/resilience-hazards/3403>
- “For the first time, a nationwide research project investigated the mental health and wellbeing of Australia’s emergency service staff and volunteers. Beyond Blue in collaboration with the CRC, surveyed 20,000 current and former personnel from 33 police and emergency organisations across Australia about their mental health and risk of suicide.”

Maintaining positive mental health and wellbeing for young adult emergency service volunteers (University of Adelaide, BNHCRC)

- See <https://www.bnhcrc.com.au/research/resilience-hazards/6884>
- “Supported by the Hospital Research Foundation, the objective of this project is to deliver a valid, defensible, practical and usable framework for supporting mental health in young adult (16-25 year old) emergency service volunteers, which can be utilised at an individual, local and organisation-wide level, in order to minimise the short and long term impacts of exposure to potentially traumatising events and maintain mental health and wellbeing more generally.

Thrive at work

- See <https://www.thriveatwork.org.au/>
- In consultation with industry and extensive evaluation of academic literature and professional practice, the Thrive at Work framework provides evidence-based strategies to address the full spectrum of mental health, including mitigating illness, preventing harm, and promoting thriving. The framework is depicted below.

Pillar	Building Block	Key Strategies
 Mitigate Illness Monitor, accommodate, and treat illness, ill-health and injury.	 Detect Illness	→ Leader and employee education → Monitor mental health
	 Support Illness	→ Reduce mental health stigma → Remove barriers to support → Employee Assistance Program
	 Accommodate Illness	→ Injury management process → Return to Work process
 Prevent Harm Minimise harm and protect against risk.	 Increase Job Resources	→ S timulating job resources → M astery job resources → A gency job resources → R elational job resources
	 Reduce Job Demands	→ T olerable demands: time, physical, cognitive, and emotional demands → Demands associated with organisational change and a lack of organisational justice
	 Increase Resilience and Coping	→ Build individuals’ resilience and ability to recover from stress
 Promote Thriving Optimise well-being and generate future capabilities.	 Create Conditions for Performance	→ Strategic Human Resource practices
	 Create Conditions for Connection	→ High quality work connections → Diversity and inclusion → Community engagement
	 Create Conditions for Growth	→ Strength-based development → Support lifelong learning



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6. LEADERSHIP

Dr Darja Kragt
School of Psychological Science,
University of Western Australia

Leadership refers to 'the ability to influence, motivate, and enable others to contribute toward the effectiveness of the organisations of which they are members' (House et al., 2001). AFAC postulates that some of the key functions of leaders in emergency management organisations are: sustaining a clear vision and consistent strategy, understanding interconnectedness and how this informs strategic planning, being visionary while being pragmatic, and acting locally while thinking globally (AFAC, 2017).

Emergency management leaders are facing ever more complex demands, including larger disasters and growing complexity of social, technical, and infrastructure systems (Owen et al., 2015). A major challenge for EM leaders is maintaining effectiveness across different contexts—day-to-day operations, routine emergency response, extreme events—and different stakeholders—employees, volunteers, community members, etc. These new demands and requirements call for EM leaders who embrace empowering, collaborative, and participative leadership behaviours (Cherry, 2014). Further to this, EM leaders should develop capacity to operate in different modes – directive versus empowering – depending on the context, and the stakeholders. Importantly, adaptive leadership transcends the capabilities of individuals alone, rather it is the product of interaction, tension, and exchange (Lichtenstein et al., 2006).

6.1. KEY TRENDS AND DEVELOPMENTS

6.1.1. In addition to technical challenges requiring known solutions, there is an increasing level of adaptive challenges and extreme contexts requiring non-technical skills and adaptive leadership.

Leadership becomes crucially important and truly required when individual, groups and organisations are faced with adaptive challenges. Heifetz and Laurie (1997) make a distinction between technical challenges—problems with known solutions—and adaptive challenges—that necessitate an invention of new solutions. This is true leadership: leading when no one knows how to proceed. Emergency services are particularly prone to experiencing adaptive challenges. For example, climate change is predicted to substantially increase bushfire risk throughout Australia, including longer fire seasons and a growing number of days of extreme fire weather (AFAC, 2018; Owen et al, 2015). The catastrophic 2019/20 bushfire season in Australia—aptly termed the “Black Summer”—is a prime example of an adaptive leadership challenge at multiple levels of complexity. Hayes and colleagues (2020) also identified *leadership and coping* as a key non-technical skill that plays a central role in performance of incident management teams. Sustainability of emergency volunteering workforce is another adaptive challenge [as discussed in the *Changing Landscape Literature Review*].

A single leader is limited in their capacity to address an adaptive challenge, which rather call for distributing the capacity for leadership to all levels of the



organisation and handing these individuals the authority to make decisions in a crisis (Hayashi & Soo, 2012). This contrasts strongly with hierarchical structures and command-and-control modes of leadership that have traditionally been widespread in emergency services. Adaptive challenges necessitate allowing individuals and groups to operate with minimal central authority to deal with a crisis quickly and effectively. For example, a study of 100 reports of “near-miss” situations in which firefighters narrowly escaped injury or death, found that leadership emerged as a collective sense making process in which ambiguity was reduced and resilience promoted in the face of danger via interaction among and between leaders and followers (Baran & Scott, 2010).

Leadership scholars have also considered how leadership evolves in extreme contexts, defined as ‘an environment where one or more extreme events are occurring or are likely to occur that may exceed the organisation's capacity to prevent and result in an extensive and intolerable magnitude of physical, psychological, or material consequence’ (Hannah et al., 2009, p.898). Research has well documented that in extreme events, individuals look to leaders to centralise authority and take action, particularly when followers feel they lack adequate resources or structure to address the threat (Olsen et al., 2020; Stoker et al., 2019). For example, research suggests that transactional contingent reward leadership style was the dominant predictor of followers’ performance in extreme events, while transformational leadership style was the dominant predictor of follower’s performance in normal, operational contexts (Geier, 2016). A natural leadership tendency in such extreme contexts seem to consolidate administrative control.

Yet similarly to dealing with adaptive challenges, hierarchical control systems may break down at certain levels of complexity in an extreme context, creating a threshold beyond which adaptive forms are needed. Capacity for adaptability allows an organisation to be more effective in responding to a changing situation (Pulakos et al., 2000).

6.1.2. Effective volunteer leadership is essential for retaining a volunteer workforce and to manage its diversity.

Volunteers constitute a major integral part of the emergency services workforce in Australia. Leadership appears to play a critical role in the volunteering context, as volunteer leaders shape and influence many of the important outcomes, including job satisfaction, affective commitment, and retention (Benevene et al., 2018). Yet volunteer-based emergency services agencies experience high rates (20%) of volunteer turnover and leadership dissatisfaction, particularly tensions related to communications and authority along hierarchical structures, are often cited as a reason for this turnover (Baxter-Tomkins & Wallace, 2009; Jones & Berry, 2017; Milbourn et al., 2019).

Volunteers are distinctly different from paid employees because they are primarily driven by altruistic or affiliative motives; they rarely have contractual obligations to their employing organizations or depend on them to make a living; and finally, volunteers also have more flexibility in joining or withdrawing from an organisation (Englert et al., 2020; Fallon & Rice, 2015). These differences mean that volunteer leaders have less legitimate power than organisational leaders (Jaeger et al., 2009), and must adapt their leadership styles to suit volunteers’



needs. Indeed, volunteer leaders report using more positive leadership behaviours, such as transformational leadership, compared to their paid counterparts (Posner, 2015).

Research offers some insights into effective volunteer leadership styles and behaviours. For example, because volunteers do not receive material rewards for their service, they are particularly sensitive to receiving recognition for their efforts. Leadership recognition and support were found to positively predict volunteer intentions to remain and negatively predict actual turnover, particularly in emergency services (Fallon & Rice, 2015; Rice & Fallon, 2011). A large stream of research has focused on applying Self Determination Theory (SDT) to enhance volunteer leadership. SDT identified three basic psychological needs: autonomy (having the freedom to carry out an activity in a chosen way); belongingness (connecting with other people); and competence (feeling capable to perform effectively; Deci & Ryan, 2000). Research has shown that when volunteers experience high levels of autonomy and competence, they are less likely to consider leaving the organisation (Haivas, Hofmans, & Pepermans, 2013).

SDT advocates for a particular style of leadership — autonomy-supportive — which involves behaviours that aim to address volunteers' psychological needs, for example, encouraging personal initiative, offering opportunities for choice, taking others' perspective into account, providing optional challenges, supporting people's competences, and facilitating social interactions (Gagné, 2003). Autonomy-supportive leadership has a positive impact on volunteers' satisfaction, intentions to remain, and a negative impact on emotional exhaustion (Jones & Berry, 2017; Oostlander et al., 2014).

Finally, researchers started to investigate the implication of volunteering workforce diversity on leadership, recognising that volunteer leaders need to adapt their leadership styles based on unique volunteer characteristics. For example, Kragt et al., (2018) found that new volunteers have different expectations when joining the service, which requires leaders to tailor their approach to improve volunteer retention. A study of State Emergency Service (SES) found that male and female volunteers reported different levels of satisfaction of psychological needs. Specifically, women reported feeling less competent, but a little more autonomous (Muhammad Farid et al., 2020). Another research study pointed to the need for adaptive leadership style based on volunteer age, due to their differing motivations and expectations (Kragt et al., 2020). Younger volunteers seek skill development and career advancement, while also preferring more flexible and self-directed volunteering, hence they require higher level of support and encouragement from their leaders. On the other hand, older volunteers are driven by altruistic motives, hence they need more guidance and direction ('to show the way') from their leaders.

6.1.3. There is an increasing need for leadership development to focus on advancing capabilities that endures over time and continuously evolves to adapt to the changing environment.

Despite the variety of approaches, models, and programs available to develop leaders and billions of dollars spent annually on leadership development globally, the evidence remains scarce whether this spending is producing better,



more capable leaders (Gurdjian et al., 2014). This is not to say that leadership development programs are not effective. In fact, a systematic analysis of 330 independent studies confirmed that leadership training leads to improvements in learning, behaviour, and results (Lacerenza et al., 2017). But there is a lack of program evaluation to understand how, when, why, and for whom leadership development programs work. There is a strong evidence that 'one-size-fits-all' approach to leadership development does not work, and instead individual's needs, learning styles, and sought outcomes should be at the centre of program design and delivery.

Given the growing need for adaptive leadership, as discussed earlier, the focus of leadership development in emergency services, should be on advancing leadership capability that endures over time and continuously evolves to adapt to the changing environment. Leadership development efforts should target all levels of organisational leadership, from frontline to executive, to develop a distributed leadership capacity that is critical in dealing with adaptive challenges and extreme contexts.

In addition to adaptive challenges, organisational leaders in emergency management organisations are also facing an increased need for coordination with multiple stakeholders, including public and private sectors, non-government organisations and broader community members. Thus, leadership development in EM sector should be focused on enhancing internal and external communication networks, promoting effective collaboration with a range of stakeholders, and embracing the use of information technologies for communication, collaboration, and coordination (Hayashi & Soo, 2012).

A great example of a leadership program that focuses on developing adaptive and collaborative leaders in emergency management sector is 'Beyond Command and Control: Leadership in Crisis' conducted through Australian Institute of Emergency Management (Owen et al., 2015). This program attracts senior and emerging leaders in emergency management to engage in cross-jurisdictional and agency collaboration and networking. During the 2.5 program days, participants explore cognitive biases, values, ethics, and communication patterns. Rather than advocating for 'one-size-fits-all' prescribed approach for effective leadership, the program encourages participants to find their own path through reflection, exploration, and teamwork. A similar leadership development program is offered by Department of Fire and Emergency Services to mid-level managers across different emergency management organisations in Western Australia.

6.2. POTENTIAL IMPLICATIONS

- ESOs should focus on developing adaptive leadership capacity at all levels of organisation by training leaders to operate in a variety of different context and situations. For example, Hayes and colleagues (2020) developed a non-technical skills (NTS) framework for emergency incident management teams which includes seven skill categories (communication, coordination, cooperation, decision-making, situation awareness, leadership and coping, stress and fatigue management). These categories can be further delineated



into 16 elements and 44 behavioural markers as a tool to equip the ES workforce and leaders with NTS and to be adaptive.

- ESOs should engage in extensive collective training and simulation to continuously maintain and enhance leaders' preparedness for operating in extreme contexts (Hannah et al., 2009).
- Leadership development programs for ES leaders must build capacity in critical reflection and in critical thinking to allow participants to examine the cultures and structures in ESOs (Owen et al., 2015).
- Volunteer leaders should promote feeling of competence among female volunteers by offering ample opportunities to master difficult tasks in training sessions, with sufficient feedback and guidance (Muhammad Farid et al., 2020).
- Volunteer leaders should be more supportive and encouraging of younger volunteers, while providing more structure and direction to older volunteers, thus addressing the unique motivations and expectations (Kragt et al., 2020).

6.3. RELATED RESEARCH

Strategic decision-making tools (Central Queensland University, BNHCRC)

- See <https://www.bnhcrc.com.au/driving-change/future-workforce>
- Decision making is a required skill for every type of emergency and every level of emergency management. Decision makers are confronted with emergencies that are often dynamic, complex and uncertain, with several agencies involved. These complex contexts can lead to an increased number of poor decisions and errors being made. It's important to acknowledge that errors and poor decisions will occur, and to seek and manage them in an informed and systematic way.

Forming part of the *Improving decision making in complex multi-team environments project*, these four tools – two team-monitoring tools and two strategic decision-making tools – were developed to improve teamwork and enable strategic decision making in emergency management.

Improving decision-making in complex multi-team environments project (Central Queensland University, BNHCRC)

- See <https://www.bnhcrc.com.au/research/multiteamenvironments>
- The current project has three main research streams: 1) The team monitoring stream has developed better methods to monitor teams and to detect breakdowns and disconnects that can impair operational performance. 2) The decision making stream has developed checklists which help people make better decisions in complex situations, through a number of decision making training modules. 3) The organisational learning stream has identified the barriers to effective research utilisation. A maturity-based organisational learning framework has been created under this stream which has also identified the barriers involved with effective research utilisation.

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7. CHANGE MANAGEMENT

Dr Jane Chong, and Professor Marylène Gagné
 Future of Work Institute (FOWI),
 Curtin University

Change management refers to 'the process of continually renewing an organization's direction, structure, and capabilities to serve the ever-changing needs of external and internal customers' (Moran & Brightman, 2001: 111). Organisations are subjected to pressures for change from many forces. Examples of forces of change include external environmental pressures (e.g., changing demographics, climate change), people (e.g., changing demands for training and upskilling, work arrangements and benefits, compensation systems), technology (e.g., new products and systems, increasing data), and competition (e.g., global competition, lowering costs). All these factors create uncertainty and force organisations to adapt and adjust their resources to meet the demands of their environments to survive. Organisations undergo two types of changes: planned and unplanned changes (AHRI, 2021). As the name suggests, unplanned changes are often unpredictable and can occur due to ad-hoc events, such as natural disasters or, as a recent example, the COVID-19 pandemic. Organisational development is the process of planned change and improvement of organisations through the application of knowledge of the behavioural sciences.

Managing change within an organisation can be a challenging and delicate process to execute. Indeed, change-management research suggest that organisational change initiatives fail more often than they succeed (e.g., Jarrel, 2017; Meaney & Pung, 2008). Many failings are attributed to the failure of organisational members to adopt and maintain necessary behaviours. Organisational members react differently to change, taking different forms of commitment that manifest in different levels of support for organisational change initiatives. Herscovitch and Meyer (2002) conceptualised individuals' commitment to organisational change along a continuum of five categories:

- **Active resistance:** demonstrating opposition in response to a change by engaging in overt behaviours that are intended to ensure that the change fails.
- **Passive resistance:** demonstrating opposition in response to a change by engaging in covert or subtle behaviours aimed at preventing the success of the change.
- **Compliance:** demonstrating minimum support for a change by going along with the change, but doing so reluctantly.
- **Cooperation:** demonstrating support for a change by exerting effort when it comes to the change, going along with the spirit of the change, and being prepared to make modest sacrifices.
- **Championing:** demonstrating extreme enthusiasm for a change by exerting effort when it comes to the change by going above and beyond what is formally required to ensure the success of the change and promoting the change to others.



Crafting effective responses and the successful management of change is crucial to ESOs as organisations face complex and uncertain operating conditions from external forces (increasingly unpredictable and frequent disasters) as well as internal forces (continuously evolving work environments such as introduction of technology and workforce planning, see *Changing Landscape Literature Review*). The purpose of this chapter is, therefore, to provide an overview of some of the main themes and considerations to organisational change management relevant to ESOs.

7.1. KEY TRENDS AND DEVELOPMENTS

7.1.1. Currently there exists a range of models and programs available for change agents to adopt to instigate change. Given the extensive time and resources required for change management, it is imperative that organisations turn to evidence-based recommendations related to the diagnosis, preparation, implementation, evaluation, and institutionalisation of change.

There exists a range of models and programs available for change agents to follow step-by-step, almost recipe-like, solutions to organisational change. However, the literature on organisational change currently lacks a comprehensive theoretical foundation and integration cross these different models (Oreg, Vakola, & Armenakis, 2011; Oreg, Bartunek, Lee, & Do, 2016). In their extensive review of the literature, Kamarova and colleagues integrated literature streams on organisational change practices and their related mechanisms to summarise a host of evidence-based practices. Underpinning these practices are a series of steps normally taken during an organisational change:

- **Diagnosis:** Change agents need to conduct a good diagnosis to uncover potential discrepancies between actual and desired states, as well as assess the appropriateness of solutions and the organisation's readiness for change.
- **Preparation:** After assessing the organisation's readiness for change, change agents also need to increase readiness where it is needed. This includes fostering initial buy-in and understanding, enhancing leadership capability, and finding political support. This step also involves creating a sense of urgency and need for change, gathering credible sources to deliver information, and using effective communication efforts to convey the appropriateness and importance of change. Leaders act as important communicators of change in this regard (expanded in point 7.1.3 below).
- **Implementation:** Change adoption is a primary consideration at this stage. There are many aspects that need to be considered, including goal setting at different organisational levels, potential restructure to ensure change aligns at different organisational levels, delivery of training and rehearsing for key stakeholders and identified role models, and empowerment through participation (e.g., inviting organisational members' opinions and feedback). Also important are invitations for



feedback on how organisational members are faring through the change.

- **Evaluation:** While it is often identified as one of the final steps of a change initiative, evaluation should occur throughout the change. Indeed, it is important to collect baseline information during the diagnosis phase, as well as during implementation and beyond. Advances in technology is useful in this regard, which is elaborated in point 7.1.5 below.
- **Institutionalisation:** Institutionalisation is an important step to ensure change maintenance through stabilising and 'freezing' new changes. As such, it involves reinforcing new behaviours through relevant incentives, removing barriers to adoption, and repetition to make the changes become new habits within an organisational culture. It may also be beneficial to provide social support to create new social norms, provide ongoing communications to remind people of new behaviours and norms, and developing rites and ceremonies to symbolically reinforce the change.

7.1.2. Self-efficacy, meaning, and belongingness are key psychological mechanisms for the adoption and maintenance of organisational change.

Successful organisational change nearly always relies on organisational members adopting and subsequently maintaining the change (Whelan-Berry & Somerville, 2010). Apart from organisational change practices described above, the organisational change literature has also examined important psychological mechanisms that affect the adoption and maintenance of change in organisations. While many psychological mechanisms have been examined and proposed to explain why change practices affect individuals' behaviour, Kamarova and colleagues summarised them into three broad categories:

- **Self-efficacy** relates to people's feelings of mastery and control during organisational change. It is an important element of change because without the belief that one has the ability to manage the demands associated with change, individuals are less likely to adopt and maintain change behaviours.
- **Meaning** relates to the sense-making process during organisational change, in which individuals come to appraise the change as legitimate and worthwhile to volitionally engage in it (or not).
- **Belongingness** relates to social forces that can be engaged to rally support for change.

7.1.3. Leaders act as important "champions of change" in change management initiatives, particularly during the preparation and implementation phases.

As highlighted in the point above, effective communication to convey the appropriateness and importance of change is critical in preparing for change. In this regard, leadership is critical to the success of any change initiative (Furst & Cable, 2008; Hussain et al., 2018; Kavanagh & Ashkanasy, 2006; Lord et al., 2017;



Tyler & De Cremer, 2005). Given that organisational leaders such as managers have overall authority, they should be equipped to engage the right people and to bring a change vision to life, through creating meaningful environment for a successful planned change (By, 2005). In relation to types of leadership, leader-member exchange (van den Heuvel et al., 2014), transformational leadership (Chou, 2014; Faupel & Süß, 2019), and authentic leadership have been positively linked to behavioural support for change (Bakari et al., 2017). For example, transformational leadership is useful during organisational changes to help people understand the “what” and “why” of the change, and for providing empathy (Huy, 2002). Along with acknowledging employees' negative feelings toward the change, these leadership behaviours build strong and trustful relationships and align individuals with organisational goals, thereby carrying the change process more smoothly.

Additionally, French and Raven identified six types of power that individuals use to influence others (French & Raven, 1959). Despite its age, research by these social psychologists is useful to help understand leaders' influence in managing change. For example, not all forms of power have a positive influence on organisational members, as such it may be useful for leaders to develop and employ different power bases depending on the situation to facilitate any change initiatives. The six bases of power are: (1) reward power, based on an individual's ability to administer and/or remove rewards, (2) coercive power, based on an individual's capacity to penalise or punish others, (3) referent power, based on others' identification and liking for the individual (often referred to as charisma), (4) expert power, based on an individual's competence, knowledge, and skill, (5) legitimate power, based on an individual's formal status or job authority (6) information power, based on an individual's access to information and knowledge via their social network.

7.1.4. Accessing and acting on real-time insights can support effective decisions based on an understanding of what the workforce is capable of in the future. As such, organisations can leverage technology for data-driven decision-making during organisational change, including monitoring, measuring, and evaluation of change.

There is an increasing broad-scale acceptance of data-driven decision-making within organisational culture (Louch, 2014). Data-driven planning and monitoring allow change agents involved in the process be better equipped to make decisions as organisational environment change. Over time, it may be important to develop leaders to be skilled at simulating how changes that occur within the organisation and outside (e.g., frequencies of natural hazards) require different approaches to workforce management. Another important consideration is the impact of these technological changes on the workforce's work design (see Section 3 - Work Design), skill requirements (see *Changing Landscape Literature Review: Physical and Digital Technology*), and the workforce's acceptance of such technology, which is elaborated in the immediate point below.



7.1.5. Given that technology is increasingly embedded in the process of organisational change, or represent instigators of change itself, it is critical for organisations to manage organisational members' attitudes toward technology.

The Technology Acceptance Model (TAM; Davis, 1989; 1993; Venkatesh & Davis, 1996) was developed to as a framework through which to understand the drives individuals' willingness to use technology. The model proposes that individuals' intentions to use a technology are determined by a function of two factors: how **useful** they perceive the technology is, and how much **control** they have over the technology (i.e., its ease of use). In line with technological advances, the model, first emerging in the late 1990s, is still being used by researchers to investigate user acceptance of contemporary technology developments such as virtual reality (Sagnier et al., 2020) and autonomous vehicles (Yuen et al., 2020). Indeed, research suggests that perceived usefulness is one of the strongest predictors of intentions to adopt technology. Other factors that have been found to be relevant to technology adoption include **self-efficacy** (i.e., individuals' perceptions about their own ability to execute a necessary behaviour – in this case their ability to use a new piece of technology), **subjective norms** (i.e., individuals' beliefs regarding the social acceptability of a behaviour – in this case, the extent to which others in the organisation seem to regard the use of the new technology as acceptable or desirable), perceptions of **external control** (i.e., extent to which they feel coerced into using the technology), and the degree to which they experience **enjoyment** while using technology (Moesser, Moryson, & Schwenk, 2013; Venkatesh, 2000; Venkatesh & Davis, 2000; Venkatesh & Bala, 2008; Venkatesh, Speier, & Morris, 2002).

Developed by E.M. Rogers in 1962, the diffusion of innovation (DOI) theory originated in communication to explain how, over time, an idea gains momentum and diffuses through a population or social system (Miller, 2015). A core assumption of the theory is that adoption of a new idea or product does not happen simultaneously in a social system. Rather, some people are more inclined to adopt the innovation than others. The five established 'adopter' categories depicted in the adoption/innovation curve widely used in business and change management and a useful approach to technology adoption – are (see also Figure 6):

- **Innovators:** Those who are willing to take risks, develop new ideas, and try the innovation.
- **Early Adopters:** Those who are willing to try out new ideas, but in a careful way.
- **Early Majority:** Thoughtful and careful people who are willing to accept the change more quickly than the average.
- **Late Majority:** More sceptical people who might use new ideas or products when the majority is using it.
- **Laggards:** More traditional and conservative end of the population who are sceptical and critical of change.

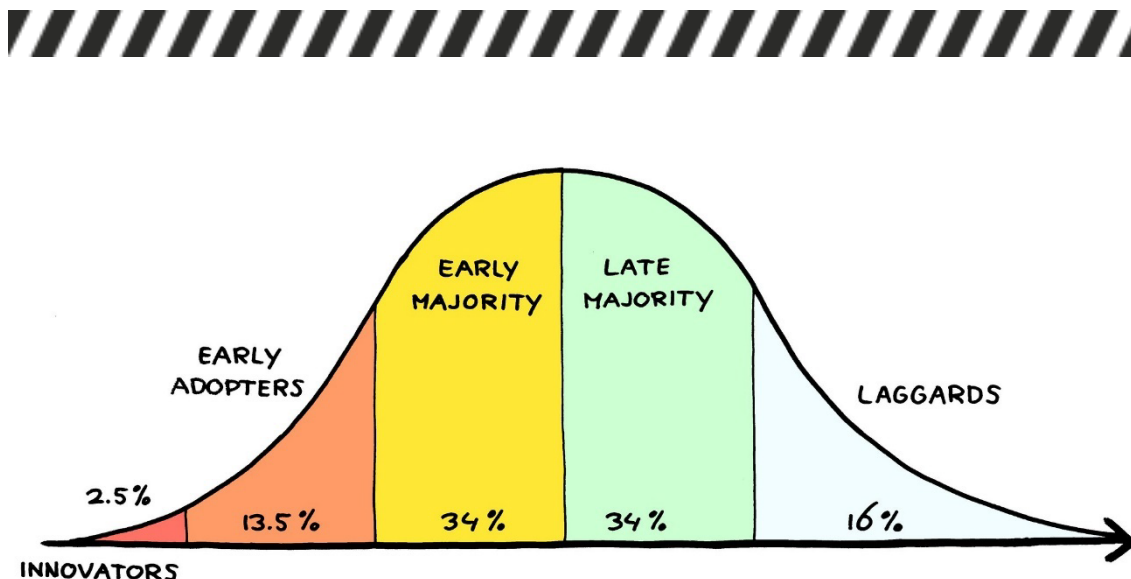


FIGURE 5: CHANGE ADOPTION CURVE, BY JURGEN APPELO, [HTTPS://WWW.FLICKR.COM/PHOTOS/JURGENAPPELO/5201275209](https://www.flickr.com/photos/jurgenappele/5201275209) (CC BY 2.0, [HTTPS://CREATIVECOMMONS.ORG/LICENSES/BY/2.0/](https://creativecommons.org/licenses/by/2.0/))

7.1.6. There is an increasing need to invest in organisational resilience for an increasingly disruptive and uncertain future. Thus, organisations need a workforce development approach that considers both the dynamic nature of work and the equally dynamic potential of the workforce to reinvent themselves (by empowering them with agency to be proactive and meeting organisational needs).

Organisational resilience refers to “the maintenance of positive adjustment under challenging conditions such that the organization emerges from those conditions strengthened and more resourceful.” (Vogus & Sutcliffe, 2007, p. 3418). With increasing unprecedented disruption and uncertainty in the future, it is important for organisations to increase their capacity to successfully respond to change and disruption to thrive. Indeed, Deloitte (2021) identified resilience as key in their 2021 Global Human Capital Trends report, noting:

Renewing workers' skills is a tactical necessity, but reskilling is not a sufficient path forward by itself. The skill shortage is too great. The investments are too small. The pace of change is too rapid, quickly rendering even “successful” reskilling efforts obsolete. What is needed is a worker development approach that considers both the dynamic nature of jobs and the equally dynamic potential of people to reinvent themselves. To do this effectively, organizations should focus on building workers' resilience for both the short and the long term—a focus that can allow organizations to increase their own resilience in the face of constant change.

One way in which organisations can achieve resilience is to reconsider their approach to uncertainty. Across many fields of research, uncertainty is often considered an aversive state that people and organisations cope with unwillingly and seek to avoid (Griffin & Grote, 2020). However, against the backdrop of the changing nature of work, recent research suggest that it is important to consider both threats and opportunities embedded within the notion of uncertainty. At the same time, emerging findings from behavioural, psychological, and neuroscience studies highlight the agentic role that individuals play in learning and exploring their environment. Against this backdrop and in proposing a model of uncertainty regulation, Griffin and Grote (2020) highlighted the importance of organisational support for members' uncertainty regulation in



today's dynamic work environment. An example includes a reduced emphasis on performance monitoring, but a focus on longer term goals to cultivate a culture that motivates exploratory choices and learning in organisational members (Greco et al., 2019). Another possible avenue to direct organisational members' attention and appraisal towards the positive aspects of uncertainty is through promoting psychological safety (Edmonson, 1999). Lastly, "a broader use of the techniques subsumed under the concept of design thinking can be beneficial to push a more uncertainty-friendly work redesign where employees are inspired to not only co-create their own work processes, but to live the spirit of playful creativity and collaboration in their daily work (Gruber, De Leon, George, & Thompson, 2015)" (Griffin & Grote, 2020, p.33). See also 7.3 Resources section for useful resources on cultivating skills and activities for enabling success in uncertain work environments.

7.2. POTENTIAL IMPLICATIONS

- Whether as an instigator or support system in organisational change, technology is an important factor to recognise in organisational change. Research suggests that the perceived usefulness of technology, as well as the ease of use of technology are important influences on whether individuals will adopt the technology (Technology Acceptance Model). As technological changes become increasingly prevalent, such as the inclusion of aerial technology in ES work or artificial intelligence becoming more prevalent in logistics (e.g., assigning resources, equipment, and making predictions during events), ESOs may wish to apply these findings into adoption of technology and communication strategies.
- As discussed in the *Changing Landscape Literature Review: Technology sections and Work Design section* in this review, technology is likely to transform how work is done, the skills that are required, and the way decisions are made, such as who and how (AI, human expert, or both). Organisational change methods are critical in managing the change that accompanies the integration of AI and other technology into work methods. It is important for ESOs to consider system-wide implications when implementing changes or embedding technology within jobs, including their volunteer workforce. This is to ensure goal alignment between all levels of the organisation, covering high-level strategy to unit and team goals, to individual employee goals.
- In implementing any change initiative and considering change practices, it is critical to consider their implications on organisational members' perceptions of self-efficacy, meaning, and belongingness to facilitate adoption and maintenance of change behaviours.
- Uncertainty is a major consequence of an organisational change for its members. Research suggests that change-related uncertainties may be best addressed by different communication sources. Specifically, direct supervisors are most important for implementation-related and job-relevant information during change, whereas strategic information may be best communicated by senior management (Allen et al., 2007).
- ESOs may wish to train or select leaders that are transformational, authentic, or those that have referent power to lead a change initiative. For example,



transformational leadership is useful during organisational changes to help people understand the “what” and “why” of the change, and for providing empathy (Huy, 2002). Training leaders to act transformationally and apply these skills in their role as change agents has been shown to be effective (e.g., Bruch & Sattelberger, 2001). Accordingly, ESOs may wish to provide training to leaders to be, or to select, change agents that are admired and respected, inspire followers through a vision, stimulate innovation, and those that support individual followers’ needs (Bass & Avolio, 1989).

- Achieving organisational culture change in ‘paramilitary’ environments that involve masculine-oriented cultures and hierarchical structures is very challenging. While scarce research on organisational change has been conducted specifically in the ES setting, there exists some evidence suggesting that supportive leadership and role modelling from senior management are essential in enhancing the credibility of change in paramilitary settings (Muller et al., 2009). Over the next decade, ESOs will likely face the challenge of how to facilitate an adaptable workforce to be an adaptable organisation that supports rapid change effectively.
- Promoting not only community resilience, but organisational resilience within ESOs. Resilience is a very familiar term within emergency management in Australia. Much of the discussions around resilience in research and in practice assumes that the context is within the community (i.e., “community resilience”). While community resilience is undoubtedly an important aspect of EM, little attention has been paid to how ESOs themselves, and their members, may become more resilient (Cole & Buckle, 2004; Mess et al., 2016). With increasing unprecedented disruption and uncertainty in the future, it is important for ESOs to increase their capacity to successfully respond to change and disruption to thrive.

7.3. RELATED RESEARCH

MAPNet: Rethinking Work Skills for the Future (Future of Work Institute, Curtin University)

- See <https://www.futureofworkinstitute.com.au/mapnet>
- The MAPNet model seeks to explain the deep structure of work tasks and allows organisations to identify the multitude of skills and activities that are fundamental for enabling success in uncertain and interdependent work environments. Using the framework, the report discusses how key skills can be developed and supported for organisational success in the future of work.



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8. MANAGING AN AGEING WORKFORCE

Dr Jane Chong, and Dr Daniela Andrei
 Future of Work Institute (FOWI),
 Curtin University

Population ageing remains one of the most important challenges of the 21st century. Australia is experiencing demographic changes (see Demographic section) which are contributing to the ageing workforce in all industries. The proportion of workers aged 55 and above has doubled since the 1990s to reach almost 20% in 2018 (ABS, 2018) and as our population continues to age, this proportion will also continue to rise. The definition of older or mature workers varies across context, disciplines, and cultures. Within workplace ageing research, older workers tend to mean those who are “approaching retirement age and those who may be working a bit beyond the standard retirement age” (Truxillo et al., 2015, p.353), and the Australian Bureau of Statistics considers individuals aged 45 years and above as mature workers (ABS, 2005).

Boosting mature labour force participation rates is critically important for Australia. Indeed, the Commonwealth Treasury estimates a 2.4% increase in GDP by 2050 if participation rates of individuals aged 50-69 are improved by 5%. Older Australians are accounting for an increasing share of the Australian workforce; Australians aged 65 and over comprise a workforce participation rate of 14.5% in November 2020 compared to 11.5% in November 2010 and 5.9% in November 2000 (ABS 2020). According to the Parliament of Australia (Thomas & Gilfillan, 2018), labour force participation has increased significantly as a result of a number of factors, including:

- generally improved health of older Australians,
- the availability of more flexible and less physically demanding forms of employment which have been used by some older Australians to transition to retirement,
- the extended period of economic growth in Australia from the mid-1990s to the global financial crisis (GFC) of mid-2007 to 2009 which created job opportunities for older people, and
- decisions to remain in employment longer, which have been influenced by the combination of a slowing in growth of superannuation balances following the impact of the GFC and various measures introduced by successive governments to increase older worker retention, such as the increase in the age at which people are eligible for the Age Pension.

As Australians increasingly work to older ages, employers face the challenge of adapting to an older workforce. Research suggests three broad approaches for organisations to effectively manage a mature workforce and reap the benefits associated with an increasingly age-diverse workforce: include, individualise, and integrate (Parker & Andrei, 2020). “Include” refers to organisational strategies to create an inclusive climate such that mature workers feel welcomed and fairly treated; “individualise” refers to organisational strategies to design and adapt work to meet the individual needs and preferences of an ageing workforce; and “integrate” refers to organisational aimed at capitalising on



increased diversity by stimulating information elaboration and knowledge exchange processes, such as mentoring schemes. Below, we expand on each of these themes.

8.1. KEY TRENDS AND DEVELOPMENTS

8.1.1. Many still hold stereotypes against mature workers, even though research suggests that they are inaccurate, and it is in organisations' best interest to reduce negative bias against older workers, and to create an inclusive climate to help mature workers feel welcomed and fairly treated.

“**Include**” strategies aim to overcome stereotypes, discrimination, and prejudice that typically manifest from individuals' natural tendencies to identify and categorise people into subgroups. Include is an important approach to managing an ageing workforce because research consistently reveals an overall negative bias against older workers (McCarthy et al., 2014). Negative stereotypes and assumptions include those related to a general decline of skills, abilities, and performance among older workers, even though evidence suggests that this hypothesis is inaccurate (Bertolino, Truxillo, & Fraccaroli, 2013; Ng & Feldman, 2008, 2010). Other inaccurate stereotypes about older workers are that they are more resistant to change, and have a lower ability to learn (e.g., Posthuma & Campion, 2009). With Australia's rapidly ageing workforce and skill shortages faced by some industries, buying into stereotypes can come at a heavy cost to employers. Some other myths identified, and separated from facts, by the Australian Human Rights Commission (2008) are highlighted in Table 8.1 below.

Myth	Fact
Mature age workers will cost the business more for their experience	Mature age employees can save costs to employers through increased rates of retention Retention of mature age workers can help maintain human capital through the form of corporate memory and knowledge There is a strategic business advantage of having employees who reflect the diversity of the customer base as the Australian population ages
Mature-aged workers may be prone to health problems	Australians are living longer and are healthier Mature-aged workers are less likely to take sick leave and experience work-related injuries than their younger counterparts
There is no long-term benefit to training and developing mature-aged workers	Australia's ageing population means businesses will need to invest in mature age employees
Younger workers are better performers than mature-aged workers	Experience is a better indicator of productivity than age
MATURE-AGED WORKERS WILL NOT BE ABLE TO ADAPT TO CHANGES AND NEW TECHNOLOGY	ABS data shows that older people (Australians aged 55-64) are the fastest growing users of technology Through appropriate training and a supportive environment, older people can be trained to use new technologies

TABLE 8.1. MYTHS VERSUS FACTS OF MATURE WORKERS (SEE AUSTRALIAN HUMAN RIGHTS COMMISSION, 2008 FOR FULL DETAILS)

These myths and/or stereotypes are detrimental to age-diverse workplaces and need to be challenged at all levels of an organisation. In common with many



other countries, there is evidence of discrimination against mature-aged workers in Australia. A survey by AHRC (2015) reported that one in four Australians over 50 reported experiencing discrimination at work.

Research has focused on creating an inclusive climate for a diverse workforce (Boehm & Dwertmann, 2015; Shore et al., 2011). Apart from preventing exclusion, such as through ensuring compliance with discrimination laws, organisations can also proactively promote inclusion. Example strategies include active recruitment of mature workers and creating a culture in which diverse workers feel psychologically safe and able to behave authentically (Holvino, Ferdman, & Merrill-Sands, 2004; Shore, Cleveland, & Sanchez, 2018). Inclusion strategies related to recruitment and reducing barriers to career advancement for mature workers has been linked to increases in the workers average retirement age and retention of mature workers (Barnett, Prof, Spoehr, & Parnis, 2008).

8.1.2. There is increasing evidence for work design (or redesign) as a strategy to promote successful ageing.

Ageing is associated with motivational, physical, cognitive, affective, and life demand changes highlighted below:

- Reduced physiological and physical abilities including sensory, muscular, cardiovascular, immune response, and capacity to maintain homeostasis,
- Cognitive changes: age-related reductions in fluid intelligence (e.g., processing speed, working memory) and age-related increases in knowledge, skills, and wisdom,
- Affective changes: age-related increase in emotional regulation (affective well-being) and age-related decrease in negative appraisal of stressful events,
- Personality changes: age-related decrease in neuroticism and increase in conscientiousness and agreeableness, and
- Motivational changes: age-related increase in intrinsic motives to accomplish, connect with others, and social motives to help people and contribute to society; age-related decrease in extrinsic and growth motives such as compensations, promotions, and mastery.

Taking into account the various changes that occur as people age, emerging research is examining workplace interventions to address older workers' needs. Work design, or the content and organisation of one's work tasks, activities, relationships, and responsibilities (see Work Design chapter), needs to incorporate and balance changes occurring within the workplace in general (e.g., rising technological and intellectual demands). Individuals' cognitive capabilities can be enhanced via good work design and, relatedly, that levels of cognitive decline can be reduced (Parker 2014). There are increasing research evidence linking influences of work design on different age groups. For example, research by Zaniboni and colleagues (2013, 2014) suggest that having task variety is more positive for younger workers, whereas skill variety is more positive for older workers. Wang and colleagues (2015) showed age differences in feedback reactions, and research by Fazi and colleagues (2019) showed that work interdependence was more positive for older workers in relation to



engagement, whereas interactions outside the organisation was more positive for younger workers in terms of job satisfaction. Ergonomic workplace designs are particularly important for older individuals due to associated declines in efficiency of the sense, physical strength, and speed. Poor workplace design and management practices have been linked to employees' poor health (Maltby, 2011). While management can redesign work, i.e. work can be changed from a 'top-down' method, work redesign can also happen from a 'bottom-up' perspective. Examples include employee job crafting and proactive behaviours (see Section 3 - Work Design section for more information).

8.1.3. It is important to manage age diversity in teams; negative effects on team and organisational outcomes may occur if not actively managed, however an age-diverse workforce that is properly managed increases human capital in terms of knowledge, skills, and abilities.

If properly managed, however, recent studies have shown that age diversity increases human capital within an organisation in terms of knowledge, skills, and abilities. Table 8.2 below provides an overview.

	Younger workers	Older workers
Knowledge¹	Equipped with up-to-date scientific and technical knowledge	Equipped with job-specific and social knowledge
Skills²	More skilled in identifying and accessing new information using advanced learning tools	Equipped with better political and social skills due to an accumulation of rich experiences in understanding informal social norms and roles while navigating complex relationships
Abilities	Higher fluid intelligence and more flexible knowledge structures, in turn enabling them to operate effectively in dynamic, ambiguous, and complex environments	Higher crystallised intelligence and more able to utilise prior experience to solve new problems
¹ Burmeister & Deller (2016); Joe, Yoong, & Patel (2013) ² Gerpott, Lehmann-Willenbrock, & Voelpel (2017); Wang et al., (2013)		

TABLE 8.2. HOW AN AGE-DIVERSE WORKFORCE CAN CREATE A MORE COMPREHENSIVE SET OF KNOWLEDGE, SKILLS, AND ABILITIES TO ADDRESS A VARIED RANGE OF TASKS AND CONTINGENCIES FACING AN ORGANISATION.

The effects of demographic differences (e.g., age) may also dissipate over time. Indeed, perceived differences in teams may be more salient to members when a team is first formed and decrease as team members get to know one another. As team members get to know one another relative to deep characteristics (e.g., personality, ability), surface traits become less salient (Harrison et al. 2002). This points to the importance of frequent intergenerational contact, which may lead to decreases in negative outcomes such as ageism (Iweins et al. 2013). Importantly, as highlighted in the table above, an age-diverse workforce can benefit from individuals' strengths complementing each other and a wider pool of resources being available if the right team processes are facilitated, such as through information elaboration and knowledge sharing practices.



8.2. POTENTIAL IMPLICATIONS

- ESOs may wish to carry out a forecast of their workforce age structure. For example, a period between five to ten years may be helpful to make realistic assumptions, and reveal the actual age structure of the workforce and its expected development by 2030. Additionally, strategy development is important to formalise priorities and targeted outcomes in successfully managing an age-diverse workforce. That is, having a better understanding of what ESOs would like to achieve -which can range from attraction and retention, improved knowledge sharing, to having less injuries and compensation claims- will help define what type of actions to focus on at different points in time.
- As workforce ageing and difficulties in attracting workers and volunteers continue, one avenue of addressing future labour shortage is for ESOs to develop talent pipelines by starting their recruitment strategies earlier with younger workforce or volunteer participants.
- ESOs may wish to train and develop supervisory behaviours that support mature workers, such as effective task allocation and the fostering of a positive age diversity climate. Despite a growing need for evidence-based practice and interventions in this area, limited research to date has examined age-focused workplace interventions. ESOs can partner with researchers to advance ageing workforce research and evidence-based intervention strategies
- ESOs may wish to adopt a proactive rather than reactive approach to manage their diverse workforce, such as using the Include, Individualise, and Integrate model discussed above. Example interventions for each theme include:
 - Include: Facilitating positive climates for age diversity and reducing bias across organisations, such as through inclusive HR practices, leadership training, and dissemination of information to increase awareness throughout the organisation,
 - Individualise: Optimising mature workers' performance via increased fit between person and job, such as work design/redesign, facilitating job crafting and proactive career behaviours, and offering flexibility in terms of works, contracts, and alternative career pathways
 - Integrate: Mentoring schemes to allow for transfer/ preservation of key organisational knowledge and expertise from experienced and mature workers to younger workforce, as well as increased knowledge sharing practices through team design, and reverse mentoring.
- Ageing is associated with a decreased ability to maintain homeostasis, which results in the body's reduced ability to maintain normal operations across situations or return to normal functioning after a change in environment. This reduction increases mature workers' susceptibility to extreme physical work conditions such as those encountered by field emergency service workers and volunteers, which may stress a person's resources and require more time to recover from a stressful event (Hedge & Borman 2012). As such, ESOs need to think proactively to minimise these higher risks, such as through work



redesign, and account for the longer times needed for certain groups of their workforce to recover from duties and injuries (e.g., through EAP or insurance systems)

- Given age-related reductions in capacity to maintain homeostasis, a consideration of how to limit nonstandard shifts that cause sleep disturbance could be beneficial to older workers who are out in the field (e.g., firefighters during bushfire season). Importantly however, this does not mean that older workers should be assigned to desk jobs that require physical effort as there are also risks associated with sedentary work for mature workers.
- A key implication of recent learnings in the literature is that in order to capitalise on strengths of an age-diverse workforce, ESOs must increasingly be willing to redesign work and the work context to accommodate changes in their workforce as they age (i.e., conduct work design interventions; see Work Design and Change Management sections). At the same time, work adjustments need to cater for individual differences within mature workers/volunteers as people do not all change in the same way as they age (Fisher et al., 2017).
- A consideration of the target audience, training context, and transfer environment is important to develop an age-inclusive training. In relation to older workers, research suggest that framing training as an intrinsic benefit, as well as tying content to be learned to a similar domain as that of the individuals' prior knowledge or experiences are beneficial to older workers.
- As technology advances, there should be a consideration of how to adapt technology to fit an age-diverse workforce rather than only focusing on adapting workers to technology.
- Given the established link between age and safety outcomes (Ng & Feldman, 2008), ESOs may wish to involve older workers in supporting the safety of younger workers, such as through training and mentoring programs which also takes advantage of and increases inter-generational interactions.



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9. MANAGING VOLUNTEER WORKFORCES

Dr Blythe McLennan
Centre for Urban Research,
RMIT University

Other sections of the Workforce 2030 literature reviews look in more detail at what research tells us about effective volunteer management practices across various stages of the volunteering lifecycle. This section adopts a broader human resource management (HRM) perspective on managing volunteer workforces within public and not-for-profit 'mission-driven' organisations. It considers major external and organisational contexts impacting on the processes and outcomes of HRM practices for volunteers in public and not-for profit organisations, and how HRM for volunteers differs from HRM for employees.

Human resource management refers to "the process of managing people in organizations in a thorough, thought-through, and structured manner" (Brewster & Cerdin, 2017, p.4). Most HRM research has focused on management of employees in for-profit organisations (Cuskelly, Taylor, Hoye, & Darcy, 2006). However, a larger body of research is now emerging with a focus on workers, including volunteers, in public and not-for-profit organisations. These organisations are mission-driven rather than profit-driven. "They exist, and they are judged by themselves and others, on the basis of the use that they put their money to—the extent to which they are able to make progress toward their mission" (Brewster & Cerdin, 2017, p.2-3).

Management is different in these organisations compared to for-profits, including people management. A key point of difference for many of these organisations is the involvement of volunteers. Research on volunteer management is, however, fragmented across a range of disciplines, and has tended not to adequately account for the "unique characteristics" of different kinds of mission-driven organisations (Kappelides & Johnson, 2020). Yet, while there remains a lot more to learn, we are beginning to better understand HRM for volunteer workforces in these types of organisations.

9.1. KEY TRENDS AND DEVELOPMENTS

9.1.1. Shifts in external and organisational contexts have made volunteer management more complicated.

Managing volunteer workforces in mission driven organisations has become more complicated due to changes in both the external and organisational environments. Because of this, volunteer management researchers emphasise the need for new approaches and practices. Further, HRM research reveals that managing people in mission driven organisations is shaped by a wider range of contextual factors compared to for-profit organisations.

Table 9.1 summarises key factors shaping the context of volunteer management in mission driven organisations that are described in recent research. The first two – changes in volunteering and increasing influence of multiple external stakeholders are discussed in the *Changing Landscape Literature Review*. The next two – differences between volunteers and paid staff, and impacts of



professionalisation and managerialism, are major areas of focus in current research and are considered in more detail below.

Contributing factor	Description	HRM implications	Sources
Changes in volunteering, particularly declining hours	See <i>Changing Landscape Literature Review: Changes in Volunteering</i>	Increasing challenges for recruitment. Increasing importance of training and flexibility in roles.	(Hustinx, 2010; Kappelides & Johnson, 2020; McLennan, Whittaker, & Handmer, 2016)
Growing influence of multiple external stakeholders, particularly governments	Including beneficiaries, funders, governments and the public. Stakeholder expectations can be competing. Has intensified with growing competition for government funding and tighter government and stakeholder scrutiny. See <i>Changing Landscape Literature Review: Shifting Expectations</i> .	Can restrict and shape HRM practices and reduce freedom of HR managers, e.g., via conditions of funding. Mission driven organisations can be subject to specific legal constraints, e.g., structure, fiscal arrangements. Greater need for transparency to stakeholders means increased bureaucracy and record keeping.	(Alfes, Antunes, & Shantz, 2017; Brewster & Cerdin, 2017; Hustinx, De Waele, & Delcour, 2015; Kappelides & Johnson, 2020)
Differences between volunteers and paid staff	Studies show differences in “values, function, benefits, contractual situation, training, and lines of responsibility” (Kappelides & Johnson, 2020)	Fewer HRM practices Can lead to conflict between volunteers and employees. Volunteer-specific HRM practices needed in some areas.	(Alfes et al., 2017; Farmer & Fedor, 1999; Kappelides & Johnson, 2020)
Professionalisation and managerialism	Has increased the formalisation of HRM and of volunteer work and increased administrative burden on managers and volunteers.	Driven the adoption of formal HRM practices for volunteers. Increased the need for active and focused volunteer management and need for professional staff to do it. Can decrease volunteer satisfaction, and conflict with volunteer values and identity. Can contribute to volunteer-staff conflict and discord.	(Hustinx et al., 2015; Kappelides & Johnson, 2020; McAllum, 2018; Van den Ende, van Steden, & Boersma, 2020)
Increasing focus on controlling risk and risk management	Focused on protection of volunteers and clients, but may not be considerate of volunteer needs, or is excessive.	Has created more complex legal, insurance and risk issues that are difficult for volunteer managers to negotiate.	(Brewster & Cerdin, 2017; Cuskelly et al., 2006; Kappelides & Johnson, 2020)
Organization size and resourcing	Particularly restrictive for smaller not-for-profits	Impacts HRM capacity and effectiveness	(Kappelides & Johnson, 2020)



Contributing factor	Description	HRM implications	Sources
Surge in digital technology	E.g., used for opportunity listings, applications communications, background screening, time tracking (Kappelides & Johnson, 2020)	Has improved aspects of volunteer management, e.g., recruitment, role matching, communication, administrative burden. Has also created challenges such as staff resistance, volunteer accountability and quality assurance.	(Chui & Chan, 2019)
Growing interest in corporate and skills-based project volunteering	Educated professionals have different expectations and motivations	Meeting expectations of these volunteers can be challenging for managers and organisations	(Kappelides & Johnson, 2020)

TABLE 9.1: KEY FACTORS COMPLICATING VOLUNTEER MANAGEMENT IN MISSION-DRIVEN ORGANISATIONS

9.1.2. There is growing recognition of differences between volunteers and paid employees from a HRM perspective.

While a growing body of research (Cuskelly et al., 2006; Kappelides & Johnson, 2020) shows that effective HRM practices are needed to support volunteers to “achieve their goals and feel satisfied and rewarded” (Warburton, Smith-Merry, & Michaels, 2013), there is also increasing recognition of important differences between volunteers and paid employees that have implications for how they are managed. As a result, numerous researchers argue for greater use of volunteer specific HRM practices in key areas, and greater attention to the specific contexts within which HRM practices for volunteers are implemented in mission-driven organisations (Alfes et al., 2017; Studer & von Schnurbein, 2013).

Key differences observed between volunteers and employees – from a human resource management perspective – relate to “values, function, benefits, contractual situation, training, and lines of responsibility” (Kappelides & Johnson, 2020; Studer & von Schnurbein, 2013). Some of the more particular differences noted in research include:

- Organisations have less control over volunteers, who thus have more autonomy and flexibility in how they behave and how they carry out their work compared to employees (Alfes et al., 2017; Farmer & Fedor, 1999; McAllum, 2018).
- Motivations for joining an organisation often differ markedly between volunteers and employees, although this also depends on factors such as activities, roles and so forth. For example, relationships and belongingness are often found to be a much larger part of volunteers’ motivations compared to employees, as is contributing to a cause or mission. It is possible, however, that motivational differences may be smaller in public sector organisations, as there is overlap in the prosocial roots of volunteer motivations and public service motivations (Alfes et al., 2017).
- Due to these different motivations and expectations, volunteers have a different psychological contract with their organisation compared to paid staff. The psychological contract refers to beliefs that workers have about “the returns they should receive for their contribution” (Stirling, Kilpatrick,



& Orpin, 2011). Psychological contracts can have transactional (i.e., focused on economic gains) and relational (i.e., focused on social and emotional benefits) aspects. For volunteers, the psychological contract with an organisation is likely to be more heavily relational (Farmer & Fedor, 1999; Hoye and Kappelides, 2020; Stirling et al., 2011; Taylor, Darcy, Hoye, & Cuskelly, 2006).

- Related to the psychological contract, the kinds of rewards that unpaid volunteers get from their work, and the ways that organisations seek to reward them is very different to employees. “When remuneration is limited, ‘perceiving support from the organization in the form of recognition, being valued, and feeling the organization cares about one’s well-being become even more important’” (Stirling et al., 2011 citing Farmer and Fedor 1999, 355). Regarding monetary remuneration, some studies show that volunteers see this as damaging to their altruistic reputation and identity (Peiffer, Villotti, Vantilborgh, & Desmette, 2020).
- Volunteers have lower tolerance for formalisation and rigid organisational practices and are resistant to volunteering that feels too much like paid work (Kappelides & Johnson, 2020; McAllum, 2018; Van den Ende et al., 2020).

In addition to the direct implications for HR practices, these differences also have potential to create tensions and conflict between paid staff and volunteers (Einarsdóttir & Osia, 2020; Rimes, Nesbit, Christensen, & Brudney, 2017; Studer & von Schnurbein, 2013). Such tensions are thought to be more widespread than is commonly acknowledged (Rimes et al., 2017). Studer and von Schnurbein (2013) summarise some of the causes of conflict, emphasising that they arise “when behavioural relationships deviate from their preconceived conceptualizations”. Key causes of conflict include “the competition for workplaces and meaningful or attractive jobs, additional workloads caused by volunteers and carried by paid staff, the fear of quality loss owing to volunteer involvement, lack of acknowledgment that volunteers contribute to the organizational mission, lack of communication, lack of trust-building measures, lack of clear goal definition, different prioritizations of goals, and struggles over the determinants of the organizational identity” (p.414).

A smaller body of research focused on public sector volunteering, in particular, suggests that there may be more intense value differences between public sector employees and managers, and volunteers compared to those in not-for-profit organisations. For example, Brudney (1990) argued that:

Sources for value disagreements between governments and service volunteers are plentiful. Public agencies endorse principles of fair and equal treatment of clients, universal selection and decision criteria, preservation of individual rights, and the provision of due process. Practices such as documentation, confidentiality, and rule compliance enjoy an honored standing. [...] To many volunteers, these values may seem ponderous and formal at best and counterproductive and unfeeling at worst. The standards may appear to elevate process above outcomes, and the needs of the agency above those of service recipients. [...] At some points during their involvement with an agency, volunteers are likely to find adherence to bureaucratic values in conflict with the desire to meet the special circumstances of clients (p.322-323).



9.1.3. Professionalisation and managerialism have mixed and complex impacts on volunteering and HRM of volunteers that are not yet completely understood.

The *Shifting Expectations* section of the *Workforce 2030 Changing Landscape Literature Review* summarises forces contributing to the professionalisation of volunteering and volunteer management. It is widely documented that volunteer management practices are becoming more formalised due to pressures such as government contracting conditions, risk management requirements, and growing reliance on voluntary organisations to deliver public services, particularly in rural areas. This shift contributes to the development of more professional and effective approaches to volunteer management, which is widely regarded as necessary given the growing complexity of volunteer management and the changes in volunteering styles (Traeger & Alfes, 2019). In line with this, there are calls for volunteer-involving organisations to invest more in supporting and developing volunteer coordinators and managers (Kappelides & Johnson, 2020), and potentially to “reconfigure or expand their HRM departments to include positions that are dedicated to supporting and managing the organization’s volunteer workforce” (Kappelides & Johnson, 2020).

At the same time, however, a growing body of research is examining how professionalisation and managerialism impact on volunteers’ satisfaction and performance, and what this means for managing volunteer workforces into the future. It has, for example, contributed to increasing volunteer workload. Warburton et al. (2013) describe “an ever-increasing avalanche of administration, compliance, occupational health and safety, risk management tasks, competitive tendering, fundraising, and obligatory reporting and paperwork”. This has intensified the demotivating impact of bureaucracy and red tape on volunteers (Alfes et al., 2017), and made some volunteering feel more like a paid job (Kappelides & Johnson, 2020; McAllum, 2018). Further, it has potential to exacerbate conflict between paid staff and volunteers by increasing tensions between professional and managerial identities amongst paid staff on one hand, and the more relationally oriented volunteer identities on the other (e.g., Rimes et al., 2017).

Due to such impacts, research indicates potential for professionalisation and formalisation to lead to a breach in the psychological contract between volunteers and organisations to occur from a volunteer perspective. This could, in turn, have negative effects on volunteer sustainability (Hoye & Kappelides, 2020; Stirling et al., 2011; Taylor et al., 2006). In regard to volunteering with non-profit organisations, Stirling et al. (2011, p.324), for example, describe potential implications thus:

“It is known that volunteers want appreciation and a caring management approach; one limited in autocratic and bureaucratic interactions. However, pressures to promote management accountability have seen the literature on not-for-profit organizations (NPOs) calling for increased human resources’ professionalization involving greater internal controls, more sophisticated training to improve management quality and also training for volunteers. Such shifts towards professionalization increase the hierarchical and bureaucratic structures within NPOs. [...] Such changes create tensions for volunteers because they do not want to be



treated exactly as paid staff. The frustration of their emotional needs will influence organizational performance. Unfortunately, the alternative minimal interference approach creates risks for NPOs as volunteers may not be suitably vetted, supervised or evaluated regarding the services they provide."

As Farmer and Fedor (1999, p.351-52) discuss, a breach of psychological contract involves a breach of trust. "If contract expectations are violated, trust and faith in the relationship are undermined, and restoring the relationship requires restoring the trust that was initially present." They also explain that while minor contract violations may be perceived as "fairly innocuous", more extreme violations "may involve feelings of betrayal, anger, moral outrage, resentment, injustice, moral harm, and psychological distress". Further, they note that violations are perceived as more severe when the psychological contract is more relational in nature, as it often is with volunteers. A breach of psychological contract is associated with intention to leave and may undermine volunteer sustainability (e.g., Walker, Accadia, & Costa, 2016). However, research also indicates a more complex relationship, with mixed reactions and impacts of psychological contract breaches involving volunteers (Hoye & Kappelides, 2020). For example, in some cases it may lead volunteers that are highly committed to the organisational mission to work harder to seek to overcome organisational deficits, while it is also possible that volunteers with more relational contacts may be more likely to remain loyal to the organisations and seek resolution rather than leaving.

9.2. POTENTIAL IMPLICATIONS

Emergency service organisations are certainly not immune to the implications of more complicated volunteer management, differences between volunteers and paid staff, and professionalisation and formalisation of HRM. The following section summarises key points made in research about managing these implications.

- Care needs to be taken with using mainstream HRM practices in the volunteering context, which need to be tailored for specific organisational and volunteering contexts. Differences between volunteers and employees have implications for HRM practices, with some standard employee HRM practices less likely to be effective with volunteers. Research also shows that the specific contexts of volunteering can significantly impact the use and effectiveness of HRM practices for volunteers. Examples include whether the volunteering is a one-off event or a long-term time commitment, and the ratio of volunteers to paid staff. As a result, "non-profits must take their 'nature' into account when developing HR strategies" (Alfes et al., 2017). The same can be said for public sector organisations that are similarly mission driven.
- In general, "the range of HR practices that HR managers can use for volunteers is somewhat limited compared to paid staff" (Alfes et al., 2017, p.83). For example, the rigor of selection processes, use of compensation and incentives, use of performance standards and evaluation, and termination for poor performance are all likely to be less frequently applied to volunteers (Farmer & Fedor, 1999, see Table 1, p.g.354). Meanwhile, HRM practices for volunteers need to emphasise the provision of non-monetary, symbolic



support: “This may take the form of recognition and appreciation for work done, personal interest in the life and well-being of the volunteer, timely and helpful feedback on the results of their efforts and providing a supportive social network of other volunteers” (Farmer and Fedor, 1999, p.362-363). As Studer and von Schnurbein (2013, p.410) explain, a growing body of research emphasises the need for “a differentiated view” of volunteer coordination, “allowing for different types of volunteer management” and more “vocation-based, networked, and collaborative”, “home-grown and value-based, and non-formalized” approaches (see also Macduff, Netting, & O’Connor, 2009).

- The most effective HRM practices for volunteers balance the need for management with flexibility and emphasise more relational rather than transactional approaches. There is a management tension between the need for well-planned and effective HRM practices and the need to meet volunteer expectations. Research emphasises the need for a balanced HRM approach that does not over-formalise volunteer roles (Kappelides & Johnson, 2020). As Alfes et al. (2017) conclude, “creating a rigid work environment with too many formalized procedures may counterbalance volunteers’ need for autonomy and self-fulfillment, thereby reducing the positive effects of HR practices.” Meanwhile, Stirling et al. (2011, p.333-34) find that “informal but safe practices may best match volunteer expectations and provide the best approach for sustaining volunteers”, and that “Organizations need to carefully monitor their use of transactional management practices with volunteers and evaluate their likely impact on their volunteer workers. Those practices that provide protection without onerous paperwork are likely to be appreciated, but those that are seen to be outside the scope of volunteers’ interests and that are more ‘organizational’ in nature may breach the psychological contract.”

Further, there is evidence that more transformational leadership styles are important for managing this tension. In the context of HRM in public sector organisations, Knies and Leisink (2018) state, for example, that transformational leadership “can change how employees perceive red tape [...] the emphasis that transformational leaders place on communication, innovation, and mission outcomes are likely to create an environment in which employees are less sensitive to rules that are classified as red tape.” (See also *Leadership* section in this literature review).

- Like other volunteer-involving organisations, ESOs need to ensure that they actively manage relationships between volunteers and paid staff. Research supports the need for organisations to engage in transactional volunteer management approaches that “address the interaction that takes place between volunteers, on the one hand, and on the other hand, paid staff, the strategic body of the organization, and other organizational stakeholders” (Einarsdóttir & Osia, 2020; Studer, 2015, p.690). It calls for volunteer coordinators to “facilitate frequent interactions between paid staff and volunteers to ensure that volunteers feel supported by the organization’s employees” (Kappelides & Johnson, 2020, p.8), as well as strong orientation and training for both cohorts, strong communication that clearly acknowledges volunteer contributions and roles, competent volunteer



coordination, and training for staff to know how to work with volunteers (Rimes et al., 2017).

- All the above reinforces the importance of ESOs ensuring that volunteer coordinators and managers, both paid and volunteer, are well supported and developed. The importance of strong organisational support for volunteer coordinators and managers within HR departments is emphasised in research. In a recent review of research on volunteer management in the not-for-profit sector, Kappelides and Johnson (2020) emphasised the importance of a strategic approach to managing volunteers, and of having a skilled volunteer manager or coordinator that “manages all aspects of the HRM process” (p.6). However, they also found that it was not uncommon for volunteer managers and coordinators to be under-resourced, inadequately trained, and under-supported by their organisations, even while organisational expectations of their contributions to the organisation’s mission are often very high (Kappelides & Johnson, 2020; Warburton et al., 2013). Meanwhile, volunteer coordinators and managers faced a range of challenges with respect to organisational support such as “issues such as credibility of the profession as a whole, the lack of executive support and understanding of their work, paid staff buy-in (including resistance to accepting volunteer workers in their departments) and integrating the work of volunteers with the agency’s strategic plan and approaches. Many volunteer managers feel a lack of clear professional identity or standards” (p.16).
- While knowledge of effective and supportive HRM for volunteers has grown recently, there remain many areas where further knowledge is needed.
 - We need to know more about the extent to which standard HRM theory and practice applies to the volunteering context, for example “the extent to which a strong HR system can create a volunteering culture” (Alfes et al., 2017).
 - “...little is known about the mechanisms through which combinations of HR practices influence volunteer outcomes, which is a critical omission, as the strategic HR literature suggests that so-called high-performance HR practices, i.e., bundles of separate but interconnected HR practices, are most effective in influencing individuals’ reactions to their role” (Traeger & Alfes, 2019, p.2)
 - “There is a need for studies exploring how HR practices can be designed to create a balance between management control and volunteer autonomy” (Alfes et al., 2017)
 - Studies are needed to better understand how mediating factors such as identification with the organisational mission, organisational culture, relationships with volunteer managers, and volunteer role characteristics influence the effectiveness of HRM practices and how volunteers respond to them (Alfes et al., 2017; Studer & von Schnurbein, 2013). In other words, under what conditions different HR practices are most effective for volunteers?



- “More studies are needed to identify potential links between intended HR practices, and for example, a non-profit organization’s ability to attract and secure funding from donors, the extent to which they are able to implement their mission and provide important services to their beneficiaries, and their reputation in the public, as mediated by volunteer attitudes and behaviors.” (Alfes et al., 2017, p.89)
- “More research is needed which takes into account how non-profit organizations [and public sector organisations] develop HR practices for volunteers at a strategic level and explores the intentions behind those HR practices as well as any differences between intended practices and volunteer perceptions of these practices” (Alfes et al., 2017, p.88),
- “We know that having positive peer support, and positive working relations with supervisors can help prevent or limit PC [psychological contract] breach but we know surprisingly little of what are the major triggers of PC violation or breach, [...] We also know little of the emotional and thought processes that underpin a volunteer determining that actions (or inactions) by various organizational actors constitute a PC violation and how this might escalate to be considered a PC breach, and what behavioral responses are triggered among volunteers following either a PC violation or breach.” (Hoye & Kappelides, 2020)
- Finally, most research on volunteer management comes from the not-for-profit context. There is a need for more research on factors impacting on the experience and management of public sector volunteering (Brudney, 1990).

9.3. RELATED RESEARCH

Enhancing volunteerism (La Trobe University, Bushfire CRC)

- See <https://www.bushfirecrc.com/projects/d3/enhancing-volunteerism>
- “The Volunteerism project has provided fire services across Australia and New Zealand with information to help strategic planning and policy development concerning volunteer numbers, and suggested new ways of recruiting and supporting volunteer workforces.”

Changing management practice (University of WA, Curtin University, BNHCRC)

- See <https://www.bnhcrc.com.au/research/resilience-hazards/3533>
- This study was part of the Enabling sustainable emergency volunteering project. It aimed to support EMOs to improve volunteer retention through effective on-boarding, and potentially through adapting volunteer roles and pathways, and to measure progress towards building a culture of inclusion amongst their volunteer base that supports effective on-boarding

Valuing volunteers: Better understanding the primary motives for volunteering in Australian emergency services (University of Wollongong, BNHCRC)

- See <https://www.bnhcrc.com.au/research/phd-valuingvolunteers>
- “The primary research questions ... ask why people volunteer for emergency service organisations (like the SES) and what are their expectations of the experience; what is the workplace reality for volunteers in an emergency service organisation and why is that so; how does an emergency service organisation better recruit and maintain the satisfaction and commitment of its volunteers and retain their services.”



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