Worker engagement, participation and representation

LITERATURE REVIEW

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RESEARCH AND EVALUATION

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WORKSAFE

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EXECUTIVE SUMMARY

The importance of workers being involved in improving health and safety is recognised in the Health and Safety at Work Act 2015 (HSWA) and the term 'Worker Engagement, Participation and Representation' (WEPR), although the act itself has been criticised as being too weak to be effective (Pashorina-Nichols, 2016; Sissons, 2016). This review was commissioned in order to support the development of interventions aimed at lifting the level of WEPR in New Zealand.

WEPR is a term that refers to a range of practices that are underpinned by different assumptions and goals. This review is broad and addresses more than conventional quantitative public health intervention evaluations such as interrupted time series or randomised controlled trials. Such evaluations are of limited number and, due to the heterogeneous nature of WEPR as context specific and difficult to measure, do not provide strong insight into the factors that contribute to diverse outcomes. Consequently this review draws heavily on sociological analyses, commentaries and discussions. This does mean however, that the review is unable to provide any numerical indication of the impact of WEPR interventions on injury, fatality or accident rates. Consequently WorkSafe should avoid making such claims.

Instead what this review highlights is the need for WEPR to be deep and empowering if it is to be successful in improving occupational health and safety management systems. Deep and empowering WEPR practices give workers the space and ability to be involved in identifying both health and safety problems, and the solution to those problems. WEPR thus needs to be more than simply consultation or tick-the-box compliance with formal systems of representation such as having a health and safety committee. It also highlights the importance of giving workers a voice that bypasses the unequal worker-manager-employer power relations in the workplace, and so removes workers' fears of retribution if they speak up or challenge management. This latter need has become more pressing in recent decades both as union density has fallen and as new, insecure forms of work become more prevalent in New Zealand and internationally (Bohle et al., 2008; Pacheco, Morrison, Cochrane, Blumenfeld, & Rosenberg, 2016; Statistics New Zealand, 2014). Lastly, this review emphasises the importance of context in determining what practices will create deep and empowering WEPR, with different practices suiting different industries and workers.

The review also highlights a number of barriers to WEPR that need to be considered and addressed. One of these barriers – management resistance – emerges from micro-level conditions. Whilst different industries have differing management cultures, management resistance occurs in some businesses in all industries. The level of resistance likely depends less on the type of work and more on the attitudes of particular employers and managers within a company and on company size, with smaller businesses being more resistant to OHS and WEPR than larger organisations (Walters, Wadsworth, Hasle, Refslund, & Ramioul, 2018). Other barriers such as declining unionisation, increasing non-standard, insecure work and the rise of practices such as labour hire and the use of consultants are more 'macro' barriers. These barriers result from changing labour laws and business practices. In all cases, they make it harder for workers or their representatives to take part in decision making or to speak up in the event of poor health and safety practices, even if they have some legal protection to do so.

There are two WEPR interventions that may be applicable to New Zealand. The first and most likely to be successful is roving or regional health and safety representatives (RHSRs). While some practices across jurisdictions vary, typically these representatives operate on multiple worksites, providing representation if needed as well as supporting businesses to improve WEPR practices. RHSRs partly bypass the power imbalance between workers and managers. They can also provide additional expertise and soft-skills for smaller businesses which are legally exempt from providing in-house health and safety representatives.

The second intervention type is participatory ergonomics (PE) programmes. These draw on a committee of workers, managers and an ergonomist to identify ergonomic risks in work practices and for workers to suggest changes and improvements. Unlike RHSRs, which are (by design) national or industry-wide programmes, PE programmes are generally implemented in a small number of voluntary businesses. This means that management retains the discretion of whether to implement or improve WEPR practices, which makes PE less likely to be implemented or successful in 'resistant' or non-compliant businesses, and unable to provide workers with an alternative voice. However, when properly implemented, PE has been shown to be successful in improving health and safety performance in some contexts.

On the weight of evidence this review suggests that a strong and clearly defined RHSR programme with support from legislation, unions and employers' associations would have the best chance of success. In order to properly develop and support this programme, WorkSafe would need to recognise that employer and worker interests in OHS do not always align, which is commonly referred to as a pluralistic approach. From such a perspective, RHSRs should aim to empower workers, rather than acting as consultants for managers or employers. Such an approach will ensure worker buy-in and also that worker perspectives, knowledge and concerns can actively improve OHS outcomes across New Zealand.

1.0 What is worker engagement, participation and representation?

IN THIS SECTION:

1.1 Arguments for WEPR and the limitations of data

1.2 Defining engagement, participation and representation

1.3 Alternative ways of classifying WEPR approaches

1.4 Discussion

The phrase ‘worker engagement, participation and representation’ distinguishes between engagement and participation.

WorkSafe is the only national health and safety regulator that uses the umbrella term ‘worker engagement, participation and representation’ to describe the broad practices designed to give workers a say in workplace health and safety. There is a broad literature on a range of practices covered by the acronym that generally finds that worker engagement, participation and representation plays a key role in improving occupational health and safety and in giving workers a voice (Batt & Applebaum, 1995; Joss, Dupre-Husser, Cooklin, & Oldenburg, 2017; Pashorina-Nichols, 2016; Walters, 2004b, 2010; Walters, Nichols, Connor, Tasiran, & Cam, 2005; Walters, Wadsworth, & Marsh, 2012).

This section will briefly discuss engagement, participation and representation before exploring alternative ways of distinguishing between the broad practices captured by WEPR. However, there is no universally agreed way of describing or defining the practices covered in WEPR, with a range of terms including participation, engagement, representation, inclusion, consultation and so on used interchangeably and often in ill-defined ways.

This section argues that distinguishing between engagement and participation, while possible, distracts from more meaningful ways of categorising WEPR practices. It is more important to distinguish between practices that empower workers by giving them a meaningful voice and power and practices that harness worker knowledge and skills to improve occupational health and safety management. Another key distinction is the two key assumptions that underpin approaches to worker engagement, participation and representation. These two key assumptions are, firstly, that workers’ and managers’ interests align (a unitarist approach), or secondly, that workers’ and managers’ interests diverge (a pluralist approach). It is also important to distinguish between deep and empowering WEPR, which aims to empower workers (and improve health and safety management through this empowerment), and shallow WEPR where the inclusion of workers is at managements’ discretion. Empowering and managerial practices are not only distinct but can be contradictory. For instance, a shallow managerial approach to WEPR may have a negative impact on future attempts to engage or encourage workers as they become distrustful of or frustrated by token attempts at involvement.

1.1 Arguments for WEPR and the limitations of data

There are strong theoretically supported arguments for WEPR. Walters and Frick (2000) argue that participation is necessary because managers' skills are insufficient to properly manage and identify OHS hazards in the workplace and to prevent exploitation of workers by management. Thus it "serves a dual purpose: to help managers pursue their OHS goals, but also to protect the separate interests of the workers" (Walters & Frick, 2000, p. 44). In New Zealand, Pashorina-Nichols (2016) has identified three arguments for worker participation: (1) an ethical argument; (2) a reduction in injuries and fatalities; and, (3) improvement in business wellbeing. The second and third arguments align with those identified by Walters and Frick. However, the ethical argument is an additional reason. It has two parts: firstly, since workers bear the brunt of workplace hazards, they should be involved in identifying and addressing them; secondly, there is an argument that democratic participation and representation is a good in itself. Regardless of how arguments are qualified, worker participation should aim to serve both worker and management interests separately and together in order to improve OHS in the workplace.

Markey, Harris, Knudsen, Lind and Williamson (2014) also discuss the rationale put forward by Knudsen which is that WEPR demonstrates the existence of an industrial democracy, social integration and organisational efficiency. Industrial democracy roughly equates to the demands of unions and socialist reformers, and thus the interests of workers, and organisational efficiency neatly fits with management prerogatives to fulfil their OHS goals. Social integration relates to the desire for governments to avoid class warfare by offering concessions and involvement to workers and their representatives whilst maintaining management control.

Regardless of the justifications, however, nearly all studies "concur that a strong role for workers and their representatives is necessary for a voluntary (management system) to effectively reduce risks at work" (Frick, 2011, p. 978). Some studies have also found a correlation between representation and rates of fatalities (Fuller & Suruda, 2000; Suruda, Whitaker, Bloswick, Philips, & Sesek, 2002), but it is difficult to ascribe a causal relationship between worker participation, representation and engagement in general and injury and health outcomes (Walters et al., 2012). However, there has been a long-history of strong, qualitative and circumstantial evidence to support its efficacy (Walters & Frick, 2000, p. 45).[1] There is also, quantitative evidence from the EU that representation, both general representation (such as unions) and OHS specific representatives are correlated with improvements in OHS management practices (Walters et al., 2012). In a Netherlands-specific study, Popma concluded that: "worker participation in OSH decision-making seems to have some positive effect on OSH outcomes, but this effect appears to be marginal. This does not imply that worker participation is a waste of resources (…) rather, it implies that the potential for effective worker participation has not yet been exploited in its full" (Popma, 2009, p. 49).

Popma highlights the limitations of quantitative data on WEPR and the difficulties in attributing outcomes to WEPR interventions. Given this limitation of quantitative studies on WEPR, this review follows the general argument in the academic literature that properly implemented WEPR will have a positive impact on occupational health and safety management systems, and a following knock-on effect on worker health and safety outcomes. The rest of the review is focused on the types of interventions that could be employed as well as the barriers and limitations that have been encountered.

[1] Even when longitudinal statistical data do exist such as with Donado's (2015) analysis of the US National Longitudinal Survey of Youth 1979, the data are generally permeated with issues of under-reporting, inability to make causal connections and multiple potential explanations so do not provide a clear indicator of the outcomes of representation.

One issue that must be considered when assessing the suitability of the interventions discussed below, *is context*. Many successful interventions have occurred in northern Europe (Netherlands, Denmark and Sweden in particular). However, these interventions also occurred in a culture of engagement, collaboration and worker democratisation that is notably lacking in New Zealand. Consequently there has been a tendency for worker participation to be treated as central to processes in these jurisdictions as opposed to the add-on/after thought they often are in New Zealand (Mylett & Markey, 2007). For instance HSRs in Demark operate on the organisations' board as well as a collaborative works committee and in safety committees and are elected by union members. This level of involvement is not present nor required by New Zealand legislation.

1.2 Defining engagement, participation and representation

WEPR covers three distinct but vague and often conflicting terms used in the literature. The three are usually distinguished from one another, but different organisations and researchers do so in different ways.

Engagement

In New Zealand, Part 3 of the HSWA roughly uses engagement to refer to the information flow between workers and employers, whereas participation refers to formal practices to facilitate engagement (Health and Safety at Work Act, 2015 Part 3 Worker engagement, participation, and representation). Similarly, WorkSafe has defined them as follows:

- "Engagement is how a PCBU involves workers in health and safety matters and decisions in the workplace", including informing workers, considering workers views and advising them of decisions
- "Participation is one way for workers to raise health and safety concerns, suggest ways to improve health and safety, and make decisions that affect work health and safety", with similar features to engagement
- Representation refers to health and safety representatives (HSRs), union representatives or any other person the worker authorises to represent them in relation to health and safety issues (WorkSafe, 2017).

In its advice to employers, Safe Work Australia has defined engagement as meaning "involving all your workers in decisions, encouraging and valuing their participation" (Safe Work Australia, 2017). Here, engagement is part of employer attitudes toward worker involvement, and participation refers to the physical activity of worker involvement in making a workplace safer. Thus, engagement is more of a mental state, whereas participation is a description of practices related to that mental state and representation is a sub-set of participation practices.[2]

The notion of worker or workplace engagement emerged in the 1990s and is generally accredited to the Gallup organisation as a way of describing workers' perceptions of their workplace. Engagement is primarily a managerial concept. It describes the motivation, commitment or satisfaction of workers to go beyond their job description and overlaps with motivation, commitment and satisfaction. Even if it can be distinguished in these terms, such as being defined as the antithesis of burnout, it retains a plethora of issues relating to its boundaries and definition (Schaufeli, 2013).

[2] The Health and Safety Executive has also used the acronym Worker Involvement in Safety and Health 'WISH' to describe a similar range of features to WEPR (Fidderman & McDonnell, 2010).

During the 2000s, the term ‘engagement’ took off in business studies as a way of managing workers’ psychological and mental resources with the aim of improving productivity. More recently, it has emerged as a way of describing and promoting workers’ interest and involvement in health and safety management. However, the underlying ideas are far older. For instance, the Robens report stated that: “We have stressed that the promotion of safety and health at work is first and foremost a matter of efficient management. But it is not a management prerogative. In this context more than most, real progress is impossible without the full co-operation and commitment of all employees” (Lord Robens, Beeby, Pike & et al., 1972, p. 18).

Participation

Much like engagement, employee participation is an ill-defined concept that is often broader than other terms such as representation, involvement, worker control, self-management and so on (Pashorina-Nichols, 2016). Generally, it describes a range of practices that provide “opportunities that enable employees to influence decision-making in organisations, and participation is played out in a decision-making context dominated by management prerogative” (Markey et al., 2014, p. 3).

Representation

Representation is the most neatly defined of the three terms, and refers to formal representation either through elected health and safety representatives or through unions. It can be distinguished from other forms of participation by the use of representatives who are afforded legal protection and legitimacy to carry out a range of functions such as inspections, representing workers in disputes and receiving information from employers (Walters, Nichols, Connor, Tasiran et al., 2005).

Whilst representation is a set of clearly defined practices that can be clearly measured and distinguished from participation and engagement, the distinction between participation and engagement is less clear. Practices designed to build worker participation both require and facilitate further engagement. Similarly, workers are unlikely to be (or remain) engaged if they lack any means of participating in OHS matters. Given the overlap between the two, the distinction is also of little significance. Good practice will improve both engagement and participation, and bad practice will damage both.

1.3 Alternative ways of classifying WEPR approaches

There are more meaningful ways to categories and analyse WEPR approaches than distinguishing between engagement and participation. In helping to categorise and distinguish between different practices, Walters and Frick (2000) suggest that three questions need to be asked of any form of worker participation:

- Who participates? (Is it workers or representatives?)
- How much participation is there? (Is participation limited to information provision/consultation or is it delegation or worker self-management?)
- Why is participation initiated? (Is it imposed on workers? Who initiates participation and what boundaries exist around participation?)

They also emphasise the importance of understanding the power imbalances between participants and exploring how these are managed or impact on the outcomes. The questions asked of participation are equally pertinent to engagement and representation practices.

Elsewhere Walters et al. have distinguished between direct and indirect participation (Harris, 2010; Pashorina-Nichols, 2016; Walters, Nichols, Connor, Tasiran et al., 2005). Walters et al. define direct participation as: "formal arrangements for the engagement of workers with supervisors, managers or employers on health and safety matters individually rather than through their collective representatives. It is a term that covers many diverse practices. But most forms of 'direct participation', imply that individuals are consulted and encouraged to become involved in the determination of their working environment or their work organisation" (Walters, Nichols, Connor, Tasiran et al., 2005, p. 9).

They are critical of direct participation because it is often ineffective and restricted to the bounds of management practices within the organisation, thus precluding deep and empowering worker engagement. It is based on the recognition that the relationship between employers and workers is unequal and, without external support such as representatives, workers are vulnerable to marginalisation and exclusion by management and employers, even if there are formal practices to include workers (Walters, Nichols, Connor, Tasiran et al., 2005) or if management has a degree of commitment to worker participation (Hall, Forrest, Sears, & Carlan, 2006).

Arguments for direct participation generally assume that workers' and employers' interests in health and safety are aligned. This assumption can be defined as a unitarist approach, and is an approach commonly adopted by government, managers and employers. This approach assumes direct participation is sufficient and sees the role of a representative as engaging in a cooperative dialogue with management (Walters, Nichols, Connor, Tasiran et al., 2005). Pluralist approaches in contrast argue that worker and management perspectives do not always align – rather, they frequently diverge – that negotiating health in safety in this context requires legislative support and regulator supervision (Garcia, Lopez-Jacob, Dudzinski, Gadea, & Rodrigo, 2007) because of unequal power relations between employers and workers. This perspective also leads to an emphasis on representation as a way to empower workers by giving them an avenue to speak up without fear of management reprisal (Harris, 2010; Walters, Nichols, Connor, Tasiran et al., 2005).

While alignment can exist between workers and employers, this review advises that a pluralist understanding suits the New Zealand context (as well as other contexts) and should be applied when designing interventions. Pluralist approaches also better capture the power relations in workplaces and highlight the necessity for third parties (such as representatives or the regulator) to support workers in the event of disputes.

A pluralist approach is further supported by clear examples of the limitations of WEPR interventions that draw on unitarist assumptions in the literature. Whilst some of these interventions such as participatory ergonomics have shown positive effects in health and safety management, they are heavily dependent on the labour environment and managers' attitudes toward having workers involved in health and safety. A repeated finding of evaluations of participant ergonomics programmes is that their success is almost entirely dependent on managerial discretion and openness to workers' views, which, were unitarist assumptions correct, would not be an issue. Managers or employers can set the boundaries of worker participation, and direct participation leaves few avenues for workers to challenge management decisions if necessary.

Shallow and deep engagement

Another common distinction made in the literature is a distinction between shallow and deep engagement/participation. Shallow engagement/participation roughly refers to instances where workers are informed or consulted but have little or no influence over their work, and decision making remains exclusively with management (Cameron, Hare, Duff, & Maloney, 2006; Robinson & Smallman, 2013). In contrast, deeply engaged workers have the ability to influence their work environment to address health and safety concerns either through management receptiveness (as is often the case in participatory ergonomics interventions) or through representatives (such as union or regional safety representatives) (Lunt, Bates, Bennett, & Hopkinson, 2008; Robinson & Smallman, 2013; Walters, Nichols, Connor, Tasiran et al., 2005). Shallow engagement is far more common. As Walters et al. note, most forms of participatory practice stay "well within the boundaries of the hierarchical controls within organisations" (Walters, Nichols, Connor, Tasiran et al., 2005). There is also evidence that workers find it difficult to engage directly with management and often fear repercussions from management if they attempt to engage without external representation (Delp & Riley, 2015; Walters, Quinlan, Johnstone & Wadsworth, 2016; Walters, 2004a).

Markey et al. (2014) offer a concise analysis of different ways to discuss the depth of engagement. They note that regardless of the continuum used, full or total engagement/participation is rarely possible under a capitalist mode of production. Essentially, such practice would involve workers having control over their workplaces. However, there is still significant variation between common practices, which can range from employer-driven programmes designed to improve organisational efficiency by improving worker commitment (pseudo-participation) through to practices that allow workers some input but still less power than management (partial participation). They also note that this is not just a difference in the form of practice but also the scope, with partial participation practices generally occurring at the strategic level, allowing workers input into high-level decisions, and pseudo participation confining decision making to the often irrelevant task level.

Whilst closely related, the depth of engagement/participation achieved by an intervention is distinct from whether an intervention drew on pluralist or unitarist assumptions and whether they are direct or representative. For instance, Robinson and Smallman argue that the effectiveness of representation depends on how engaged management practices allow workers to be, which can range from no engagement, through information provision, consultation and finally workers instead engaged in negotiation over workplace health and safety issues (Robinson & Smallman, 2013). Similarly, interventions based on unitarist assumptions such as participatory ergonomics can produce deep worker engagement/participation given the right managerial environments.

1.4 Discussion

Given the difficulty in distinguishing between engagement and participation, and the tendency for different authors to prefer one term over the other, this review will treat the two of them synonymously to refer to any practices, attitudes or policies designed to involve workers in occupational health and safety including consultation, representation, participatory ergonomics and so on. Even when they are distinguished, the distinction is dubious because it is impossible to engage (as verbal communication) without practices to facilitate that and impossible for participation practices to exist without some engagement component.

As mentioned above, representation is a common and particular form of engagement/participation that relies on an authoritative third party to represent workers' interests either in agreement with or through negotiations with management on health and safety issues and is treated distinctly in the literature.

As several authors (most notably David Walters) have observed, it is important that an intervention aims to address power imbalances and empowering workers beyond identifying issues or having a voice in management. In New Zealand, this importance was also noted by the Independent Taskforce on Workplace Health and Safety, arguing that there needs to be a mind shift in New Zealand "not only to lead to more opportunities for worker participation but also to set an expectation that everyone in the workplace is responsible for workplace health and safety. Everyone must feel empowered to intervene when they see an unsafe situation" (Independent Taskforce on Workplace Health and Safety, 2013).

Consequently, distinguishing between engagement and participation is less important than an assessment of whether a practice produces deep and empowering worker engagement/participation whilst addressing power imbalances between employer/management and workers or if it is a management-controlled shallow form of engagement/participation such as consultation.

2.0 Methods

This literature review is designed to collate the international and New Zealand literature on worker engagement, participation and representation.

To this end, it aims to address the following questions:

- What evidence is there for the current state of WEPR in New Zealand?
- What evidence is there for the efficacy of interventions to improve worker engagement, participation or representation?
- What are the barriers and challenges likely to be encountered by interventions to improve WEPR?

To answer these questions, a non-systematic literature review of relevant articles was undertaken. While the review is non-systematic, there were strict criteria for the selection of the literature. To be included, a text must:

- be either in a peer-reviewed journal or published by an organisation with a similar remit to WorkSafe (eg Health and Safety Executive (HSE) or Safe Work Australia)
- provide or review empirical evidence on WEPR and interventions to improve WEPR practices
- provide expert positions on WEPR in areas where the empirical evidence is inadequate to assess the likely outcome of WEPR interventions.

The sources were selected through a range of keyword searches using academic databases and the websites of government departments.

3.0 The current state of WEPR in New Zealand

Many businesses in New Zealand lack formal WEPR practices, and when practices are present, they are often poorly implemented and at management's discretion.

KEY FINDINGS

- The perceived level of engagement has remained stable over time.
- Fewer businesses are employing formal health and safety practices such as representatives.
- Small businesses are far less likely than large businesses to have worker representation practices.
- There is a disconnect between workers and employers in perceived level of engagement.
- Qualitative data suggests that many practices are not properly implemented, and also need to be tailored to fit different workers and organisations.

There is no definitive source of WEPR measures in New Zealand and due to the difficulty in measuring various features of WEPR, it is unlikely that WorkSafe will ever have a comprehensive picture of WEPR practices. However, various projects undertaken by WorkSafe, Ministry of Business, Innovation and Employment (MBIE) and New Zealand researchers provide insights into the current situation. Taken together, these measures indicate that, whilst many organisations have at least one formal WEPR practice, these practices are often shallow. It appears that, in many cases, these practices are primarily about administration and management of health and safety or meeting legal requirements rather than providing an avenue for meaningful engagement, something also demonstrated by the international literature. Furthermore, there is evidence that the use of formal WEPR practices has declined since 2012.

Health and safety representation in New Zealand has had a long history, with calls for legislation to support the role of HSRs occurring in the 1980s and legislation passed by the outgoing government and repealed by the incoming government in 1990. Employers' representatives were particularly opposed to any legislative support and preferred HSRs to operate at the employer's discretion. The resulting

voluntary code of conduct and requirements were largely ineffective, with the Employers' Federation also hamstringing it with their own, contradictory code for representation to restrict union influence in the workplace (Harris, 2011).

Management prerogative, already the key determinant of OHS in New Zealand, was further entrenched in the Employment Contracts Act 1991, which largely removed existing limits on employers to determine their own OHS system. The Health and Safety in Employment Amendment Act provided partial support for HSRs. However, due to opposition from businesses, the Act reaffirmed management prerogatives. In particular, the Act exempted smaller businesses from requiring an HSR unless requested by an employee and gave such employers the right to refuse such a request. This provision has been carried over in the HSWA with some revisions and has been criticised for being a weak and inadequate provision (Harris, 2010; Pashorina-Nichols, 2016; Sissons, 2016).

MBIE NATIONAL SURVEY OF EMPLOYERS

The National Survey of Employers (NSE) includes a question about whether the employer's business has a range of WEPR practices. The results are broken down by business size and industry. Since the survey has been conducted annually since 2012/13, it provides a useful source of data for both the distribution of practices and how these practices have changed over time from the employer's perspective.

The NSE has found that the total proportion of businesses with both elected and informal health and safety representatives has been declining. In 2012/13, 38% of businesses had an elected health and safety representative, and 44% had an informal representative. By 2016/17, these numbers had declined to 28% and 27% respectively. A breakdown by sector indicates that elected health and safety representatives declined in all sectors except manufacturing, and the presence of informal health and safety representatives has declined in all sectors.

The decline in representatives primarily occurred in small businesses (<20 employees) who were already less likely to have either form of representative. Larger businesses (≥20 employees) were more likely to have formal health and safety practices such as a committee, elected representative and/or health and safety as a regular item in team meetings than small businesses in 2012/13, and these numbers have been fairly stable.[3] In contrast, only 35% of smaller businesses had an elected health and safety representative in 2012/13, which declined to 23% in 2016/17. The number of both large and small businesses with informal health and safety representatives has also declined, suggesting that formal health and safety representatives are not being replaced by informal practices. The gap (although not the decline) echoes findings from Europe that small and medium businesses are least likely to have a representative or engagement practices than larger businesses (Walters et al., 2018).

Overall, fewer businesses have health and safety committees than representatives (18% in 2016/17). However, businesses with 20 or more employees were just as likely to have a committee as an elected health and safety representative (68% had a committee in 2016/17), whereas smaller businesses were less likely to have a committee (12% had a committee in 2016/17 compared to 23% with an elected health and safety representative). As with representatives, the number of large businesses with a committee has been stable since 2012/13.

Including health and safety as a regular item in team meetings is more common than either committees or representatives across business sizes. In 2016/17, 48% of small businesses included health and safety as a regular item, and 82% of large businesses did the same. Unlike other practices, the proportion of all businesses, regardless of size, having health and safety as an item has remained stable.

[3] In 2012/13, 68% of larger businesses had an elected health and safety representative, and 64% had one in 2016/17.

The NSE breaks down businesses into six industries; agriculture, forestry and fishing; manufacturing; construction; retail trades; accommodation and food services; healthcare and social assistance and ‘other’. Some relevant findings are:

- agriculture, forestry and fishing was the industry least likely to have either form of representative in 2012/13 but still saw a significant decline between 2012/13 and 2016/17
- manufacturing businesses were most likely to have a health and safety committee (30% in 2016/17), a regular system of communication (53% in 2016/17) and an elected health and safety representative (40% in 2016/17).

The NSE provides useful insights on WEPR practices from the perspective of employers. In particular, it highlights the lack of formal and informal practices among small businesses that are exempt from legal requirements under the HSWA. Due to their number, low capital availability and short lives these businesses are harder to reach through non-legislative means, making the lack of practices somewhat unsurprising.

Whilst it provides a useful starting point, the NSE gives no evidence as to the effectiveness of the practices employed or how well they are implemented. It also solely attends to employers’ self-reported practices. Other evidence from New Zealand, including the Health and Safety Attitudes and Behaviours Survey, and a range of qualitative research provide additional insights to supplement the NSE findings.

NIELSEN HEALTH AND SAFETY ATTITUDES AND BEHAVIOURS SURVEY (HASBS)

The Nielsen Health and Safety Attitudes and Behaviours Survey (Nielsen, 2015, 2017) contained several questions relevant to both worker engagement/participation and formal representation practices and can offer some evidence for the effectiveness of practices from both the worker and employer perspective. Since the survey ran for four years, it permits the tracking of short-term changes in reported practices and perspectives from 2014 to 2017. Overall, the survey found that both workers’ and employers’ perspectives on the level of worker engagement has remained stable since 2014. It has also found employers have a rosier perspective on the current ability for workers to be engaged in their health and safety than workers themselves.

In 2017, 79% of workers said that they always have a say in decisions, a smaller proportion than employers, 85% of whom said that they involve workers. This misalignment appears to be growing, with workers’ results remaining stable since 2014 but employers’ results having increased in 2015 and 2017. When divided up by sector, between 80% and 90% of agriculture, construction and forestry workers said that they had a say, significantly higher than the number of manufacturing workers (65%) and ‘other’ workers (62%). In contrast, between 80% and 90% of employers from all sectors said they involved workers in decisions.

Many other questions shared similar patterns, with workers less likely than employers to say they were able to be engaged in various ways, with the largest gap in the manufacturing sector. For example, 76% of workers and 88% of employers across all sectors said things are discussed in an open or helpful way most of the time. However, 70% of manufacturing workers said so (the lowest of all sectors) compared to 92% of manufacturing employers (second only to forestry employers). Supporting the NSE results, manufacturing workers and employers were just as likely as others to say they had various formal types of representation in their workplace, and there was little significant difference between employers and workers in reporting these practices.

The survey asked workers and employers how strongly they agree with a range of statements about how involved workers are in determining health and safety outcomes. The percentage of workers who say they agree or strongly agree with the statements each year are summarised in the table below. The 2017 results show no significant increases or decreases since 2014. However, a few results have fluctuated year on year. As with other questions, employers were more likely than workers to agree with all of these statements.

	Percentage of workers who agree or strongly agree with the statement			
	2014	**2015**	**2016**	**2017**
My boss encourages us to speak up if we feel something is unsafe	72	75	79	75
My boss encourages us to come up with ideas for how to make our work safer	66	66	68	68
My boss would totally support me if I suggested we stop work because of a possible hazard	66	69	72	68
My boss always shares relevant health and safety information and updates with workers	N/A	70	73	70
When my boss makes decisions about workplace health and safety, workers are always told how their views have been considered	N/A	52	53	53
Where I work, workers really do make a difference to health and safety	N/A	65	69	67

TABLE 1: Worker agreement with statements

These results suggest that most workers feel that they are involved with health and safety issues at work and that few workers feel that they are not able to speak up or be involved in their own health and safety. However, this may be due to low expectations among New Zealand workers for engagement as a result of a history of hierarchical and authoritarian management practices and lack of WEPR practices (Markey et al., 2014). Furthermore, survey results may not actually be correlated with workers' ability to influence their working environment (Hall et al., 2006) and so such positive findings should be taken as indicative only. Either way, there is clearly still room for improvement in some areas, most notably in bosses informing workers about how their views are considered and the way information is provided. It seems that management provides information about decisions and hazards to workers but that this may not always be in a suitable fashion that workers can easily understand.

The HSABS findings suggest that practices may be perceived by employers to be sufficient to engage workers but that some workers may disagree. Qualitative research coupled with academic literature also suggests that these practices may not be well implemented (accidentally or intentionally), which may further explain the gap between workers and employers.

QUALITATIVE RESEARCH FINDINGS

There are a number of qualitative studies that address WEPR practices in New Zealand. These provide a deeper and more nuanced understanding than surveys, allowing an understanding into why certain features occur as well as understanding how people feel about them. WorkSafe has conducted two projects into the manufacturing and forestry sectors' attitudes toward health and safety, and both of these projects have included discussions of WEPR. There are also a few studies conducted by academics that help to further develop the picture of WEPR in New Zealand.

As with the HSABS, the manufacturing interviews highlighted that there are several issues with the implementation of WEPR practices in the sector. Whilst the analysis of this data has not finished, some early themes for improvement have emerged. In particular, the data indicate that, whilst formal representation practices such as health and safety committees and health and safety representatives were common, there was often a lack of clarity around the roles and a varied approach to worker representation on the committees, with practices often unfit for purpose. For instance, one employer stated that their committee consisted of themselves, three managers and "one person from the floor every time, so a different person" who they bring in to the meeting. Such a set-up is highly unlikely to create a meaningful space for workers' voices and concerns to be heard, both due to the apparently involuntary nature of worker representation, the rotating nature of the role and the managerial majority in health and safety committees.

Secondly, some respondents reported that their health and safety committee was ineffective, and a 'waste of time'. Some managers noted that the level of engagement and participation from workers was often poor, and they struggled to get volunteers, particularly when the committee was new. Some did mention that over time, workers became more confident in raising issues and speaking up. Other research however, has found that the practice of shoulder-tapping workers by management and marginalising worker voices was common in the New Zealand hotels sector, despite a lack of difficulty in getting workers to volunteer for the role, suggesting that many managers prefer to maintain control over worker representatives regardless of worker enthusiasm (Markey et al., 2014).

Some employers also saw inductions as a sufficient way of getting commitment to good practice and engaging workers, but for many organisations, the induction was a box-ticking exercise of getting workers to sign an agreement, even if the worker did not read though the required paperwork. This form of minimal compliance was, however, frequently stated as the primary method of engaging workers in health and safety. This suggests that formal, minimal training may be perceived as a sufficient level of WEPR by some employers.

The findings from the survey of employers and the qualitative data align with the large quantity of evidence on health and safety representatives internationally. As Harris summarised, "Employee participation tends to be widespread in sectors that are either high risk, highly unionised and/or have high proportions of large businesses" (Harris, 2010, p. 27).

Harris also noted that legislation was almost a requirement for greater participation and representation, with the 2002 HSE Amendment Act establishing a requirement for larger businesses (30+ employees) to establish an employee participation system (Harris, Olsen, & Walker, 2012). The HSWA largely retained the same provisions as the HSE, including its exemptions. This continued exemption, coupled with the vagueness of requirements may explain the apparent decline in representation since 2012, as many employers realised there were few or no requirements for them to develop or maintain formal WEPR practice in the workplace.

Harris et al. (2012) identified four types operating in manufacturing plants: administrators, workshop inspectors, problem solvers and craft experts.[4] The authors note that the approach to HSRs in non-unionised workplaces was top-down and aligned to management interests, in contrast to the more negotiated approach in unionised workplaces. They also argue that the vague legislation around HSRs was an important contributing factor to the preponderance of top-down practices among HSRs (Harris et al., 2012).

[4] Administrative HSRs were appointed secretaries with a role of administrating OHS and solving health and safety problems. They were most commonly employed in non-unionised businesses and were effectively an additional layer of management. Workshop inspectors had a similar function of administrating and monitoring compliance and were also found in non-unionised workplaces. However, they were tradespersons and labourers selected by managers as opposed to secretaries. Problem solvers and craft experts were both found in unionised businesses, and both worked with managers to solve health and safety issues by providing workshop knowledge at committee meetings.

Formal WEPR practices are not always preferred by workers, as illustrated by WorkSafe's 2016 forestry project (Lovelock & Houghton, 2016). Interviews with forestry crews found that formal representatives and committees were relatively rare, and when health and safety representatives (champions) were present, they were selected by contractors rather than elected by workers. However, there was also a feeling that the small size of crews and lack of interest from workers meant that formal representatives and committees were unsuitable. Furthermore, workers preferred informal, face-to-face forms of engagement rather than having anything formalised or written down. Instead, the small size permitted all employees to be part of monthly health and safety meetings and weekly tailgate meetings that fulfilled some roles of health and safety committees. Overall, workers were happy with this style of engagement in forestry and are highly sceptical of paperwork-based systems. For instance, they were wary of being asked to sign safety plans due to concerns that they would be held liable for accidents if plans subsequently changed (Lovelock & Houghton, 2016).

Whilst the forestry industry in general is sceptical of and avoids formal practice, the HSABS has found forestry workers consistently more likely than other workers to report being engaged and supported by management. These two findings highlight that less-formal engagement practices in forestry fit the nature of the employment structure in the sector. When considered alongside the 'tick the box' mentality found in manufacturing, this suggests that WEPR needs to be tailored to particular sectors. Whilst they are more easily measured, formal health and safety practices may not actually improve worker engagement and participation, especially when there is little or no management commitment to engage their workers. The international literature has consistently found that management engagement is the most important factor in determining the importance workers put on safety in the workplace (Kines et al., 2010; Zohar & Luria, 2010), rather than adherence to formal systems.

DISCUSSION

As mentioned above, a plausible explanation for the discrepancy in worker and employer perspectives about WEPR is that some employers perceive the presence of formal 'tick the box' exercises to be sufficient, whereas in practice they may not provide employees the opportunity for substantive participation/engagement. Practices such as shoulder-tapping a worker to take part in a particular committee meeting may, from some employers' perspectives, allow that worker to act as a representative. However, 'representatives' selected in such a way may not represent workers' perspective. Furthermore, workers may not feel comfortable speaking up alone in a committee of managers without being confident in their legal protection, particularly if they have been selected to participate in a one-off situation. The growing confidence of workers over time reported by some respondents suggests that ensuring HSRs are in the role for a while is important to ensure the position is used effectively. Lastly, tick-the-box approaches to induction may be reported by some employers as informing workers, whereas for workers, it is something they are required to sign to get the job, not something that encourages engagement. However, overall further research is needed in this area in order to gain a richer understanding of the issues around WEPR in New Zealand.

What the gap does indicate is that the pluralist understanding of workplace health and safety interests is a better fit for the New Zealand evidence as it explains the differences in the HSABS and also the findings of the qualitative research. As will be discussed in the next section, international research also supports a pluralist approach, with several interventions being unsuccessful due to management reluctance or resistance.

4.0 Worker engagement, participation or representation interventions, outcomes and barriers

IN THIS SECTION:

4.1 Representation

4.2 Participatory ergonomics

4.3 Other occupational health and safety management systems and third party interventions

4.4 Barriers to improving WEPR practices

Regional Health and Safety Representatives provide the most promising potential intervention to improve WEPR in New Zealand workplaces.

Voluntary practices such as participatory ergonomics can also be successful, but only in larger organisations that are already open to involving their workers in decision making.

Having discussed the debates around WEPR and the situation in New Zealand, this review now moves on to cover the international evidence for what WEPR programmes or features of WEPR programmes may be applicable in New Zealand workplaces. This section also canvases both the outcomes of quality WEPR and the barriers and limitations that need to be overcome. There are two WEPR programmes that this review focuses on – regional/roving health and safety representatives (RHSRs) and participatory ergonomics programmes.

RHSRs rely on a combination of union, regulator and business support to provide multi-site representatives. The remit of RHSRs can vary from assisting smaller employers to develop WEPR and OHS management systems to providing a representative who workers can call upon. Given this varied remit and the potential extra strain the role can put on representatives, it is important to clearly establish the function and boundaries of RHSRs and distinguish the role of representation from the role of a health and safety consultant.

Participatory ergonomics programmes rely on a combination of worker, manager and ergonomist input to identify and solve ergonomic hazards in the workplace. Whilst they vary significantly, they have been shown to be effective in stable workplaces such as workshops or manufacturing plants. Unlike RHSRs, participatory ergonomics programmes are generally internal to organisations, rather than national programmes run by the regulator. This makes them voluntary, meaning that they are unlikely to be implemented by businesses that are not already focused on involving workers.

This section also discusses some of the barriers to WEPR, the primary one being management and/or employer resistance or lack of support for a programme. In both national and organisational programmes, management support has been identified as the primary reason for the lack of success or abandonment of programmes. This can be outright refusal to support a programme, but it may also be the unwillingness of managers and owners to relinquish proper control over the work process. Instead, WEPR can become limited to workers implementing solutions identified by management, rather than identifying hazards, working on solutions and taking ownership over their implementation.

4.1 Representation

KEY FINDINGS

- There is significant qualitative, theoretical and anecdotal evidence as to the effectiveness of health and safety representatives and union presence in improving health outcomes.
- Regional or roving health and safety representatives have also been found to be a popular and well-received intervention in some jurisdictions.
- Regional health and safety representatives can successfully operate in industries that are traditionally hostile to OHS and WEPR, but are most effective when a tripartite approach is taken.

Representative practices have strong support in the international literature for both improving health and safety management and empowering workers. The specifics of representation vary, but they all rely on legally-supported, independent bodies to provide workers a voice in health and safety issues. As discussed earlier, they are successful in this role because they give workers an alternative avenue for discussing issues within the context of unequal labour relations between workers, managers and employers. Even when representatives are primarily focused on empowering workers, they have been strongly associated with improved OHS management and may also be well-received by employers.

Unions

There are broad health and safety benefits from union presence indicating that union representation remains a good form of representation that can lead to improved health and safety outcomes (Walters, 2004a, 2004b, 2010; Walters & Frick, 2000; Walters, Nichols, Connor, Tarsiran, & Cam, 2005). Firstly, several studies have found an association between the presence of a union on site and lower injury rates (Shannon et al., 1996; Walters & Frick, 2000). Suruda et al. found that the fatality rate among unionised trench makers was approximately half that of non-unionised trench makers (Suruda et al., 2002). Several studies from the EU and USA have found that workplaces covered by a collective agreement were more likely to have more stringent enforcement of OSHA policies, as well as helping improving monitoring and reporting (Weil, 1992), and that the presence and involvement of unions makes other forms of OHS participation such as health and safety committees more effective (Markey & Patmore, 2011; Popma, 2009; Walters & Frick, 2000). Other studies found that joint health and safety committees without a union-nominated safety representative were as effective as those with a union representative in reducing injury rates (Reilly, Paci, & Holl, 1995). This indicated that there may be other factors to consider when discussing the benefits of unionisation, but generally the weight of evidence is in favour of unions positively benefiting OHS outcomes.

In addition to direct benefits there is evidence that unions support other forms of representation (see the Regional health and safety representative section below). There is also strong evidence that declining union densities has, alongside law changes and lax enforcement, resulted in less support for health and safety representatives in general and a more top-down authoritarian approach to management (Hall et al., 2006).

Unions have been the traditional form of worker representation in New Zealand. However, with the changing nature of industrial relations and shifts in employment law in New Zealand, coupled with the associated decline in union density, alternative practices are likely needed to supplement and support union representation. Alternative representatives can also be focused solely on health and safety issues, unlike union representatives who address a range of employment issues.

Works councils

Works councils, consisting of both employers and employees, are a common feature of northern European workplaces and were found by the European Survey of Enterprises on New and Emerging Risks to be the most common type of formal worker representation in Europe (Walters et al., 2012). They address a range of workplace factors, including OHS and function to give workers a voice and make workplaces more democratic and egalitarian. In some countries, particularly the Nordic countries, works councils are built around union involvement, but in others such as Germany, this is not necessarily the case (Mylett & Markey, 2007; Walters & Frick, 2000). In either case, they function as a form of independent worker organisation that can address health and safety alongside other issues.

Popma (2009) studied the impact of employer and union works councils, unions and ministry-run OHS covenants on occupational health and safety in the Netherlands. Popma found that organisations covered by a works council had better risk assessment practices than those that were not. Furthermore organisations that involved the works council in developing protective measures were significantly more likely to use these measures than those who did not. Popma also found that works councils that were more active and had more contact with unions generally had a greater impact and they concluded by noting that works councils had a marginal but significant effect on OHS management practices, but that this could be further strengthened if the role was better supported.

One potentially positive impact of works councils, as opposed to a dedicated OHS committee or representative, is that, by addressing OHS alongside other work issues, they make OHS an everyday part of work practices instead of something done in addition. Furthermore, the model commonly adopted with works councils involves elected worker representatives sitting on boards of directors. This may raise OHS considerations to investors and not just to a select group of middle managers increasing the importance of OHS issues in the workplace (Mylett & Markey, 2007).

However, as with other forms of representation, works councils such as the Danish Cooperation Committees rely on the preconditions of strong unionisation (which Denmark has) and legislative support (which it lacks). Knudsen notes that the committees, whilst successful and required by law, have little ability to formally sanction employers and so operate largely at the employers' discretion. They can still be highly effective in negotiating on a range of issues, but this success is determined by the business context, with many committees merely disseminating information rather than actively providing a space for bipartisan negotiation (Knudsen, 2006). Similar findings have been observed in Germany where, despite laws protecting works councils, in many businesses, management successfully isolates, weakens and eventually disbands the works council (Jirjahr & Mohrenweiser, 2016). Jirjahr and Mohrenweiser (2016) also suggest that owner-operator businesses are particularly antagonistic toward works councils not (only) for economic reasons but because they are concerned about losing power over the business to workers.

Given New Zealand's history of a strong owner or managerial prerogative in running the business, works councils will likely find resistance in New Zealand and, given poor unionisation rates and a weak culture of employee engagement, are unlikely to be well supported. The partial successes and frequent failures of works councils in Europe does again highlight the importance of attending to the unequal power relationship between workers-managers-employers and the need for external representation and support for workers to be proper participants in health and safety decision making, rather than relying on employers' good will.

Regional health and safety representatives

Health and safety representatives are generally employees in the workplace they represent. However, this creates several issues for the successful implementation of the role. Firstly employee HSRs may fear repercussions from their employer for stopping work or speaking out. They may also not be elected but rather selected and legislation in most jurisdictions excludes small businesses from having HSRs (Frick & Walters, 1998). One solution to these issues is the promotion of regional health and safety representatives, a solution that has been implemented in several European countries (Allen, 2004; Buzacott & Berger, 2004; James & Walters, 2002) and in the Australian and New Zealand mining industries (Walters, Quinlan, Johnstone, & Wadsworth, 2016).

In their report to WorkSafe Victoria, Buzacott and Berger (2004) identified five regional health and safety representative programmes in Sweden, Italy, Spain, the UK and Denmark, each with slightly different features. These programmes had varying levels of success and several different features, generally relating to the specifics of the role of RHSRs and the level of support provided by industry organisations, unions and regulators. Generally these approaches establish some form of independent regional health and safety committee or group of representatives who have a degree of authority to intervene on behalf of workers, are usually run by the union and are supported by industry, government or both. Regional health and safety representatives have also been found to have some success in addressing health and safety issues in small businesses (Walters, 2004b).

SWEDISH REGIONAL SAFETY REPRESENTATIVES

Sweden has the longest running, best established and most successful regional health and safety representative programme in the world. It has been running since 1974, and in the late 1990s, there were over 1500 RHSRs in Sweden, nearly all of whom were affiliated with a union (Frick & Walters, 1998). The programme has relied on legislation, close cooperation between industry and strong trade unions to provide roving health and safety representatives and funding from industry organisations. It has provided greater scrutiny, advice and health and safety outcomes for small businesses across Sweden.

The Swedish regional health and safety representative programme was established by legislation stating that trade unions may appoint a regional health and safety representative for businesses exempt from having a health and safety committee (those with fewer than 50 employees) and that have at least one member of a trade union on staff. The legislation built on earlier legislation that aimed to address the difficulty in securing representatives in industries with transient workforces (Frick & Walters, 1998). The regional health and safety representatives are well trained, and fulfil a range of roles including inspecting and investigating workplaces, dispute resolution and discussing health and safety management with small business owners. However, Frick and Walters note that, in practice, the conditions of small businesses and the lack of health and safety expertise of most small owner/operators means that RHSRs spend most of their time problem solving and investigating issues rather than representing workers (Frick & Walters, 1998).

The Swedish system, despite some opposition by industry groups, has been popular among small businesses and unions. Indeed, Frick and Walters note that "one of the reasons for the success of the Swedish scheme is the level of support it receives from trade unions, the regulatory authorities and employers" (Frick & Walters, 1998, p. 384). They also noted that RHSRs rarely had disputes with employers, but that in the few instances it was necessary, they were able to show the muscle required. They also worked well with labour inspectors and could perform conflict resolution when necessary.

As well as requiring buy-in from industry, the Swedish model also requires commitment to training and retaining RHSRs. Whilst the cost is comparatively low and much of it is borne by the unions, there have been issues of under-funding of RHSRs, which has further contributed to a tighter focus on problem solving rather than WEPR. Lack of funding also raised issues around the training and support provided (Frick & Walters, 1998). There may also be changes in legislation required in order to provide legitimacy and authority to the role. The HSE has noted this is likely the case in the UK, noting that, whilst there is "a strong case to argue that to effect access to representation for workers in small enterprises, more specific legislation provisions may be required" (Health and Safety Executive, 2009, pp. 182-183).

WORKER SAFETY ADVISORS AND ROVING SAFETY REPRESENTATIVE PILOTS IN THE UK

Whilst the Swedish model serves as an exemplar of RHSRs (despite some issues), the UK situation is perhaps more reflective of the likely context that New Zealand representatives operate in. Several limited RHSR schemes have been attempted in the UK, firstly the Worker Safety Advisors pilot in automotive engineering, construction, hospitality and the voluntary sector, and the Roving Safety Representatives scheme run by the Transport and General Workers' Union in agriculture. Both schemes found RHSRs to be effective and feasible. Although they share similarities, there are differences between the New Zealand and UK contexts. In particular, in the UK, worker HSRs are union appointed, which leaves large gaps in coverage for the non-unionised workforce that RHSRs can help to fill.

The Transport and General Workers' Union programme was unilateral due to opposition from the National Union of Farmers and limited support from the HSE. The RSRs were given 10 days of training in health and safety on farms, as well as knowledge of standards and trade union approaches to agriculture. The programme was further disrupted by the 2001 foot and mouth outbreak, leading to many farms dropping out. However, despite the opposition two evaluations found the programme had some positive effects in both supporting workers and improving health and safety management on farms (Knowles, 2006; Walters, 2000). None of the RSR visits resulted in formal enforcement, and few were of a preventative nature. They were also found to be positively received by most employers who they visited (Knowles, 2006). Importantly, though, the scheme also highlighted the need for legislative and regulatory support and employer buy-in for RHSR schemes to be fully successful (Walters, 2000).

As the name suggests, Worker Safety Advisors (WSA) were more focused on improving health and safety management rather than representing workers, and indeed the term was chosen to avoid the term 'representative' (Allen, 2004). This differentiates them from the Swedish system, as safety advisors are more consultants than representatives. Whilst demonstrating some success and being well received by employers, they may not provide an avenue for deeper worker participation or engagement and were also opposed by unions (Allen, 2004).

The WSA pilot ran from 2001 to 2003 and covered 88 employers (mostly smaller employers) across the UK (Shaw & Turner, 2003). The pilot recruited nine WSAs through unions and gave them additional competency training. The WSAs' role included carrying out inspections and audits, assisting workers and employers to carry out risk assessments, providing reliable health and safety information and facilitating communication between workers and employers. However, an initial survey found that only about one-third of employers thought that the role of WSAs was representing the interests of workers, with far more seeing it as investigating hazards or conducting risk assessments similar to an inspector. Evaluations of the pilot also found that, whilst initially industry-specific knowledge and health and safety competency were seen as the most important skills, after the pilot there was an increased prioritisation of soft skills as key to the WSA role (Shaw & Turner, 2003).

WSAs were seen to be effective in their role, and employers and workers were generally supportive of their approach. Most of the pilot workplaces were visited multiple times, with 55% being visited four or more times, and employers generally reported that this was an appropriate level in their feedback. Follow-up visits were also found to be “an essential element in representing the interests of employees, especially if an initial approach by workers had been unsuccessful, as employees did not necessarily have the skills and experience to put their case effectively” (Shaw & Turner, 2003, p. viii). Given the voluntary nature of the pilot, employers retained the right to refuse entry and to refuse the right of WSAs to speak to their staff. However, refusing to allow WSAs to speak to staff was rare, and only two employers reported having problems with the visits. Even more positively, several employers would have preferred that the WSAs continue to visit after the pilot.

Shaw and Turner (2003) identified a number of considerations they believed would be important to allow the WSA pilot to be rolled out nationally. These were primarily focused on costing and the need to convince employers to participate if the scheme was voluntary (the latter would be less of an issue if the scheme was supported by regulation). They noted that there were various options where the WSAs could be full-time professionals seconded from large businesses or union officers. Each option had advantages but also costs, either financially or in the time requirements for the WSA. Funding was also a consideration, with several potential options including union funding, employer levies, various insurance schemes or public funds, the latter of which they recommend. Lastly, they note that there is likely a need to change regulatory frameworks to provide authority and legitimacy to the role and to prevent poorly performing businesses opting out.

OTHER REGIONAL HEALTH AND SAFETY REPRESENTATIVE PROGRAMMES

Several other RHSR programmes exist in Europe and Australia. These are generally either industry or region specific. In all cases, they rely on a combination of union organisation and legislative support to protect the representatives. Employer reactions vary, with some examples of close cooperation in Spain, Denmark and Norway, but more hostile relations in Italy and Australia.

Regional health and safety representatives in Italy are appointed by trade unions and protected by legislation on worker representation. They are most effective in northern Italy and in sectors with significant trade union density. They provide representation for workers in organisations employing fewer than 15 workers and covered by a collective agreement and are also supported by bipartite bodies of trade unions and employers. These bodies provide training, information and also mediate disputes over representation (Johnstone, Quinlan, & Walters, 2005).

Valencia demonstrates one example of close cooperation between unions and employers. A programme between 1999 and 2001 involved both unions and employers’ organisations training their members in health and safety, with union representatives functioning as RHSRs (Walters, 2000). This is facilitated by the right for unions in Spain to actively look for infringements on sites (without entering them) and report infringements to the inspectorate. The inspectorate in-turn informs local unions if an infringement notice is given, to allow the union to monitor the action taken by the firm (see Health and Safety Executive, 2009 for more information). There is little evidence of a positive impact from the scheme even in areas where most of the RHSRs are active. However, Buzacott and Berger note that the scheme operates in a hostile environment, where even its presence is considered a positive step in improving WEPR (Buzacott & Berger, 2004).

A form of multi-site representation operates in the Queensland coal mining industry, an industry typically hostile to unions and worker engagement. Statutes require mines to contain three elected site safety and health representative (SSHRs), and for the miners’ union to appoint three industry safety and health representatives (ISHRs) (Walters, Quinlan, Johnstone & Wadsworth, 2016).

Representatives have to be experienced miners and are usually but not always union representatives. Both types of representative have the right to represent workers, issue provisional improvement notices and, as a last resort, suspend work or cease operation in the mine. There was no evidence that either improvement notices or suspension of operation were common or used indiscriminately.

Despite the difficulty of the HSR's role, Walters et al. (2016) highlighted the positive impact HSRs had in the workplace. They noted that the ability to stop work was well used and that "possessing such powers considerably strengthened perceptions of their legitimacy amongst colleagues and bolstered their confidence they would be taken seriously by senior managers" (Walters et al., 2016). They also found that workers would often approach HSRs after work hours due to fear of management repercussions and loss of work if they were seen reporting concerns. Walters et al. found that the ISHRs identified similar risks to mining inspectors and also provided important support to SSHRs and to workers who were fearful of repercussions if they spoke up against managers. They also noted that ISHRs frequently provided support outside of work hours, which put pressure on them, but also noted that there was a strong sense of dedication and commitment for this role from both types of representatives.

Workers were highly supportive of ISHRs and SSHRs and were willing to support the representatives' decisions, even if mine managers disagreed or this would require stopping work. In contrast, managers were often hostile or unwelcoming to representatives, and representatives felt that inspectors (who were often ex-mine managers or looking to work as managers in the future) often excluded them from inspections and had varying attitudes towards the representatives. Walters et al. (2016) also noted that HSRs frequently reported under-funding, time restrictions and hostility from management. Overall both evaluations have found that the inspectors were successful in a hostile work environment (Walters, Quinlan, Johnstone & Wadsworth, 2016).

CONCLUSION

If properly implemented, RHSR programmes can provide both greater empowerment for workers to participate in OHS and improvements in OHS management systems, particularly in smaller organisations. Taken together, this evidence indicates that, to be successful, they need tripartite support but that they can still show some success without support from employers' associations. Their apparent success in agriculture and small organisations indicates that they can be successful in improving WEPR in areas that are traditionally hostile to both OHS and worker involvement.

4.2 Participatory ergonomics

KEY FINDINGS

- Participatory ergonomics interventions combine behaviour change ergonomics programmes with giving workers more control over their work environment.
- Most but not all studies have found positive effects from participatory ergonomics interventions and attribute this to greater worker involvement.
- There are some questions about the suitability of participatory ergonomic interventions for non-compliant or non-manufacturing companies.

Although they are primarily an ergonomics intervention, Participatory Ergonomic (PE) interventions make up a significant part of the evaluation literature of interventions containing some element of WEPR. Although there is significant variation between different PE interventions, typically, "a participatory ergonomics

program [...] employs one or more teams assembled for the purpose of improving the design of work, and the common element is to ensure utilisation of the expert knowledge that workers have of their own tasks by involving the workers, and others potentially affected by proposed changes" (Burgess-Limerick, 2018, p. 290).

These teams are generally trained by an ergonomist or similar. They do not always involve worker engagement, as some teams may be committees constituted of managers and experts, but in general, PE is seen as most effective when worker engagement is part of its foundation (Van Eerd, Cole, Irvin, Mahood, & Keown, 2008). Whilst PE is traditionally focused on ergonomics and harm prevention, it also encourages workers to help identify and remove issues in their workplace that might cause or aggravate discomfort, injury or ill health (Henning et al., 2009). These interventions often involve workers receiving training on ergonomics, the time to identify and design their own changes to the work process and receiving support for implementing the changes. In short they allow workers to be recognised as subject-matter experts in the risks and harms in their workplaces. Engaged workers are more likely to identify ways of improving outcomes, develop a shared understanding of problems and be more accepting of changes than when they are instructed to make changes by management (Henning et al., 2009; Nagamachi, 1995).

PE interventions may be more effective than training and behaviour change interventions where workers have little ownership over the changes. However, PE interventions also rely on management discretion over what level of worker engagement is permitted and also do not provide an independent avenue for workers to have their voices heard if they disagree with management. So, while they are likely to be effective in improving health and safety management, and possibly engagement in organisations that are already open to worker engagement and have positive worker-management relations, they are unlikely to be effective in organisations with more contentious relations or where managers are not open to greater worker involvement in decision making.

Van Eerd, Cole, Irvin, Mahood and Keown (2006) reviewed 33 peer reviewed and 19 grey literature evaluations of PE interventions to look for tendencies, consistencies, barriers and facilitators to the success of PE. Overall, they found that PE interventions were successful. They are also heterogeneous, but most included some form of training for workers, frequently supervisors in the intervention (about half also included upper management) and were voluntary (if this was mentioned). They noted that there were numerous contextual factors that needed to be considered when designing an intervention. These included:

- workplace size and site number
- workplace culture
- unionisation
- economic context and workplace stability
- production changes
- workforce demographics.

Nearly all interventions reviewed by Van Eerd et al. (2006) resulted in changes to tools/equipment used by workers, with fewer changing work processes and very few changing work organisation. They suggest this was the result of the limited remit given to teams, coupled with the ease of identifying changes in equipment compared to changes in processes or organisation. They noted that in most cases, worker teams were given a problem-solving remit and rarely had responsibility to either design or monitor the PE intervention. Lastly, they identified large numbers of barriers and facilitators. The most common ones were management support, the resources provided, the training quality, team creation, levels of communication and organisational knowledge.

Rivilis et al. (2008) conducted a different systematic review about the effectiveness of participatory ergonomic interventions on health outcomes. Twelve studies were appraised using a best evidence synthesis approach to be of sufficient methodological quality to use, five of which focused on manufacturing or factory workers. Eleven of the 12 studies reported a positive effect on health outcomes associated with participatory ergonomic interventions. However, due to the heterogeneity in methodological approach between the studies, the authors concluded that there was partial to moderate evidence that participatory ergonomic interventions are effective in improving health outcomes. More recent studies have also found mixed effects of PE programmes (Dale et al., 2016; Driessen et al., 2011; Haukka et al., 2008).

As noted above, there is also a general finding that the success of PE interventions depends on management commitment levels, with a lack of commitment at all levels from management being the most likely cause of failure of a PE programme (Burgess-Limerick, 2018). Other studies have supported this argument, for instance, Dale et al. found that, in one PE programme in the construction industry, whilst many workers were receptive, many contractors were unsupportive especially if they believed the programme would interrupt their work and would be costly (Dale et al., 2016). Van der Molen et al. found a similar attitude in bricklaying. They attempted a controlled trial of a PE intervention to improve ergonomics among bricklayers. However, they found that none of the five intervention companies completed the intervention, and only two of them began implementing it by identifying objectives the programme aimed to achieve. Overall they suggest that participatory ergonomics is not likely useful in companies that are not health and safety leaders. They also suggest that a recession that hit during the trial may have further impacted on compliance rates (Van der Molen et al., 2005).

Burgess-Limerick (2018) suggests that PE programmes are likely to be most successful in organisations that already have many of the features of worker participation. She notes that PE interventions are more likely to be successful in organisations that are less hierarchical, have better labour relations, have a tradition of consultation and have good communications channels. Furthermore, most PE programmes limit worker participation to initial consultation. Workers are generally responsible for identifying problems and solutions under the guidance of an external ergonomist, and the decision-making process remained with management, with little if any worker input and infrequent union involvement (Burgess-Limerick, 2018). These findings suggest that it is less a case of PE improving participation but instead PE is dependent on existing practices of worker consultation and participation to be successful.

Burgess-Limerick's findings were echoed in a study of a Canadian manufacturing plant by Granzow and Theberge (2009). The authors found that a PE programme was met with a high-level of scepticism by workers in the plant. They suggest that a combination of previous semi-dedicated efforts to improve health and safety, a history of contentious workplace relations and an unwillingness by management to devolve meaningful decision making power (and no involvement beyond the ergonomics programme) were the cause of this. They also noted that several management practices such as one-minute surveys or writing down complaints discouraged workers and delegitimised the programme. They quote one worker who stated that management "stand there and listen to you, write little things down, and you never ever hear about it again. In one ear and out the other …" (Granzow & Theberge, 2009), and most workers felt that stop-work action or workers actually being hurt were the only causes of significant management concern.

In general authors also argue that PE programmes exist along a spectrum from top-down to full PE programmes. This is demonstrated in the figure reproduced below from Henning et al. (2009). This follows a similar schedule of engagement

from no engagement through consultation, partial engagement and full worker participation and engagement in workplace redesign with assistance from external experts. From this perspective, elements of the organisation that limit worker control over the workflow processes are barriers to improved health outcomes, and management should be encouraged to empower workers to be more deeply involved.

It is also important to ensure that participatory ergonomics programmes, and other forms of direct worker engagement are not behavioural management schemes dressed up as participatory programmes. As the Henning diagram indicates, top-down approaches prevent adequate participation and are unlikely to result in significant improvement in occupational health and safety management. Indeed, as several of the case-studies discussed in this review highlight, they may lower engagement as workers become increasingly sceptical of token schemes initiated by management.

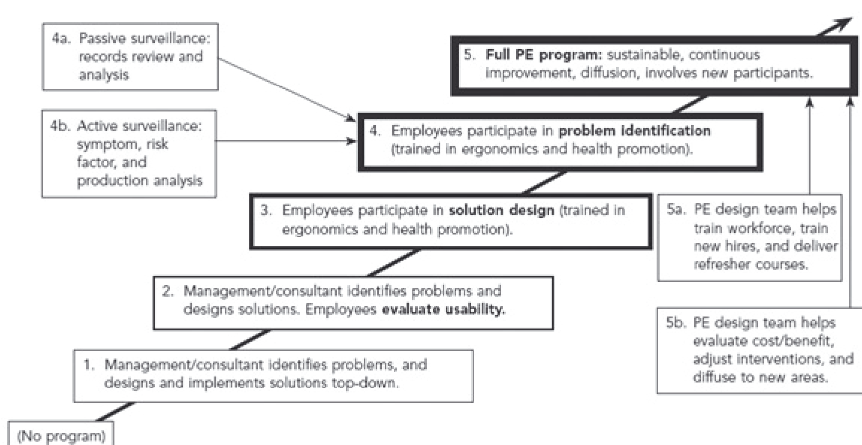

FIGURE 1: Elements of PE programmes, reproduced from Henning et al. (2009 p. 124)

Participatory ergonomics interventions can be successful in many but not all workplace environments. The voluntary nature of such programmes means that they are unlikely to be attempted in workplaces that do not already prioritise OHS and are not already open to WEPR practices. Instead, they are more likely to improve already high-performing organisations. Furthermore, the depth of engagement offered by PE programmes can vary, with some offering little more than token engagement even if they are intended to offer more. They are likely to work in contexts where employers' and workers' perspectives are most aligned. However, as discussed previously, a pluralist perspective is a much better fit for New Zealand workplaces than a unitarist one. Consequently, PE programmes should only be promoted cautiously and are unlikely to be effective at a national level.

4.3 Other occupational health and safety management systems and third party interventions

KEY FINDINGS

- There are various other types of occupational health and safety management systems that include some form of WEPR.
- These are often implemented with the support of a third party such as universities or unions.
- However they are rarely successful because they rely on sustained management interest and willingness to devolve decision making to workers.

In addition to PE programmes, there are a number of other corporate, voluntary, organisation-based OHSMS many of which include some form of participation or engagement. Whilst these systems are varied there is reason to be sceptical about their likely success. Robson et al. note that the estimated failure rate of quality control systems is between two thirds and 93% and that “there is reason to expect the failure rate of OHSMSs would be at least as high [because] typically, the level of management commitment to high product or service quality is higher than to employee health” (Robson et al., 2007, p. 333).

Issues of commitment to voluntary programmes by management give rise to the preference for external representatives as these representatives are not reliant on management commitment to effectively promote worker engagement/participation. There is also concern that OHSMS may weaken other forms of occupational health and safety such as regulatory approaches and external worker representation (Robson et al., 2007) and that, if not properly implemented, they will harm future attempts to get worker support. Indeed, they are often implemented as union avoidance strategies rather than sincere attempts to improve OHS management (Markey & Patmore, 2011).

Toolbox talks and similar measures are commonly used as ways for workers to participate. However, there is evidence that many talks are of a perfunctory nature, and many people who give them have no training (Harrington, Materna, Vannoy, & Scholz, 2009). Furthermore, a study of small US construction crews by Alsamadani, Hallowell and Javernick-Will (2012) found that toolbox talks were used by crews with varying injury rates. However, high performing crews tended to have a varied mix of regular, formal and informal communication both between managers and workers and between workers compared to poorly performing crews. This suggests that toolbox talks, whilst important, may not be sufficient to engage workers if there is not wider buy-in from management.

A long-term study of non-union representation at a New South Wales steel plant by Markey and Patmore highlights some of the issues voluntary systems faced. Health and safety committees operated at the plant from 1924 onwards. However they were always management dominated, with the plant’s owners citing management prerogative in health and safety matters (despite union protest), and their mandate and approach fluctuated depending on management foci and interest. For instance, the committees morphed into mandatory health and safety meetings in the 1970s when management “shifted their agenda away from representatives raising grievances to safety training and lectures and films” justified by the need for prompt correction of issues (Markey & Patmore, 2011). Despite this, unions continued to push health and safety issues, which, coupled with the Australian Labor government enacting new legislation in 1983, led to a more cooperative approach. However, by the late 1990s, this had been reversed as management worked to limit worker representation to the lowest level of committees and promoted a top-down management style (Markey & Patmore, 2011). Markey and Patmore conclude by noting that the committees retained management control, had limited impact on representation and were frequently circumvented or ignored by managers. They were also particularly isolating for immigrant workers who had to learn procedures “on the job” (Markey & Patmore, 2011).

Whilst establishing formal systems for engagement and participation may be appealing from a regulatory point of view, they do not necessarily suit all organisations. For instance, work by Masso in Estonia indicated that the presence of formal health and safety management practices is actually associated with workers feeling less able to participate in health and safety management (Masso, 2015). If Masso’s findings are correct, formal health and safety systems may function as a barrier to employee engagement. Masso suggests that formal systems orient health and safety towards a management prerogative and away from workers’ opinions and responses, which would echo some case studies where WEPR practices become part of OHS management practice.

This again emphasises that there is a distinction between representation, which is found to be effective, and employee-inclusive management systems, which Masso and others have found to have a negative effect. This is not to say that OHS management and worker participation are necessarily conflicting. Instead, to return to Walters and Frick's discussion, participation is necessary for good OHS management practice, but there are different types of management strategies that purpose to permit participation (Walters & Frick, 2000).

Hammer et al. (2015) conducted a randomised controlled trial on the SHIP (Safety and Health Improvement Programme) in 2012. The study involved 292 construction workers in an American municipal utility department. A total of 125 workers were included in the intervention, with 167 in the control. The intervention involved an in-depth training programme for supervisors to identify, monitor and track areas to improve over a two-week period and a four-hour session for work teams to identify problems, solutions and voting on key work issues. The teams developed an action plan that was agreed with management. Overall, the study found that, whilst there was good uptake of the intervention, at a 12-month follow-up there were no significant differences in self-reported health or safety participation scores between the control and intervention groups. There was a marginally significant improvement in blood pressure in the intervention group compared to the control group after 12 months.

Robinson and Smallman (2013) provide some evidence that different levels of engagement affect health outcomes and level of perceived engagement, especially at lower union densities. They found that workplaces where worker representatives perceived the level of management engagement with workers to be low had higher injury rates and vice versa. They also note that higher union density results in an improved level of engagement. Work in the health sector reviewed by Michie and Williams has found that training staff in supporting others, participating in problem solving and partaking in decision making improved staff feedback and morale and reduced instances of depression (Michie & Williams, 2003).

Several academics have highlighted the importance of strong regulatory support in facilitating deep and empowering WEPR (Robinson & Smallman, 2013; Walters, 2004a). This argument has also been applied to New Zealand by Pashorina-Nichols, who argues that legislation needs to restrict employers' discretion in choosing representatives. She notes that some restrictions are provided by HSWA, but she is critical of the exceptions for some companies which are not present in the Australian Model Act. Furthermore, the legislation needs to encourage a strong workplace culture and management commitment, information and training for employees and trade union involvement in health and safety (Pashorina-Nichols, 2016).

Cameron et al. (2006) trialled four different interventions to improve worker engagement in the construction industry:

- pre-task briefings with workers provided with feedback cards
- suggestion boxes for workers
- site walk-arounds with management and a management-selected employee safety champion where management and champion recorded conversations with workers
- a traditional health and safety representative.

The evaluation contains some limitations, particularly due to small sample sizes, but overall there were mixed results. Worker perceptions of their ability to engage increased in all cases, but no measures of significance were attempted and perceptions of engagement were already extremely high. Furthermore, there was reluctance for workers to use either feedback method, with few workers filling out the feedback cards and none using the suggestion boxes, with workers preferring oral feedback methods. There was also reluctance for the selected

site-safety champion to fill out their diary and a tendency for managers to record worker transgressions spotted on walk-arounds in their diary. These findings feed back into the limitations of survey measures of engagement such as those produced by the HSABS and highlights that these may not accurately reflect levels of engagement or participation.

Other management interventions such as lean production, whilst promising greater worker autonomy and decision making, have, if anything, increased stress, lowered decision making and resulted in significantly higher injury rates. For instance, an early systematic review by Landsbergis and Cahill concluded that: "the studies reviewed provide little evidence to support the hypothesis that auto manufacturing workers are empowered under lean production. In fact, recent studies tend to confirm early case studies which suggest that lean production in auto manufacturing plant intensified work pace and demands. Increases in decision authority and skill are very modest or temporary, and decision latitude remains low" (Landsbergis & Cahill, 1999).

Furthermore, several studies they reviewed found significantly increased rates of musculoskeletal disorders and other injuries associated with increased stress, repetition and low job control.

Some interventions in specific organisations are implemented by third parties, typically unions and universities. These interventions have shown some successes, but in general, they display the same limitations and barriers as other forms of voluntary WEPR.

Seixas et al. (2013) conducted an evaluation of a combined university and union-led intervention aimed at improving the performance of a health and safety committee in a medium-sized American scrap metal firm. Prior to the intervention the firm fulfilled the legal requirements for having a health and safety committee, but there were a number of issues with the committee, and it was generally seen as ineffective, particularly by workers. Some of the issues included:

- the discussion was in English, despite the first language of a majority of speakers being Spanish
- workers and managers would sit at different tables during committee meetings, and workers had minimal to no involvement in decision making
- the committee would occasionally raise issues, but would not develop any plan to address them
- workers "reportedly felt vulnerable if they 'complained' about conditions on the site that appears to be dangerous" (Seixas et al., 2013, p. 64).

The intervention aimed to address these issues and consisted of a combination of a two-day training for committee members to improve collaboration, worker involvement and efficient functioning (partially paid for by management partially through a research grant) and changing the health and safety committee to a bilingual approach (the training was also bilingual).

As a result of the intervention, the committee undertook two initiatives. Firstly, they invited engineers to assess their current traffic management system, which had been run by untrained workers and implemented changes. Secondly, they produced a suite of bilingual fact sheets for workers on how to report hazards and on the importance of health and safety.

Throughout the process, management's attitude varied from scepticism to disruption of the health and safety committee, with the exception of the health and safety director, who largely ran the committee and so was supportive of its functions. The researchers noted that both before and after the intervention, management frequently cancelled meetings and that management (including members on the committee) would also bypass committee approved practices and did not demonstrate best-practice guides they had set. This attitude changed slightly, with management giving the company picnic a health and

safety focus, but the focus of management continued to be that of blaming workers for accidents and the insurance representative who spoke at the picnic went so far as to tell workers that reporting claims would reduce the pay of their colleagues (Seixas et al., 2013).

Although management attitudes were not conducive to worker engagement, the intervention did appear to increase communication between workers and management and also allowed workers to develop solutions to some issues. There was also a feeling the committee was less prone to blaming workers for accidents and that foreign born workers were more comfortable in raising health and safety issues.

One study of a range of collaborative projects between universities, regulators and unions in California has found some evidence that worker representation and engagement can be improved in high-risk, low union-density industries such as car washing, hotel housekeeping, airport below-wing staff and warehousing (Delp & Riley, 2015). Importantly, the study did not attempt to measure the effectiveness of these interventions in reducing injury or disease rates. Instead it provided a series of case-studies that had resulted in some change to discuss features of that particular campaign. Common features of the campaigns included providing workers space outside of their working environment to discuss health and safety issues, support from external bodies (universities, inspectors or unions) for workers to help them identify hazards and report them in ways that were less likely to result in repercussions from the employer and helping bring infringements to the attention of the regulator Cal/OSHA. However, whilst these interventions occurred in low-union industries, the authors also noted that they coincided with an upswing of union membership and activism, which may have caused the improvements (Delp & Riley, 2015).

4.4 Barriers to improving WEPR practices

There are many barriers to the implementation and success of WEPR interventions. Some of them are specific to particular interventions whereas others affect all interventions. Two particularly significant barriers to all interventions, however, are employer and management reactions and the changing nature of work and employment practices. Neither barrier is completely surmountable, but both of them need to be addressed and considered when designing WEPR programmes. Both are also particularly relevant to New Zealand, which lacks a corporatist or collaborative employment culture and which has seen a rapid growth of insecure labour practices in recent decades (Bohle et al., 2008; Pacheco et al., 2016; Statistics New Zealand, 2014). A decline in union density is an additional barrier that has been covered earlier in this section.

Lack of employer and management commitment

KEY FINDINGS

- Resistance or even a lack of commitment by employers and management is the biggest barrier to WEPR programmes.
- Regardless of the intervention attempted, it is important to try and facilitate a tripartite approach.
- However, it is also important that WEPR programmes remain committed to representing and supporting workers rather than becoming management or consultancy tools.

A recurrent feature of this review has been the importance of management commitment in order to ensure both that WEPR practices are implemented and that they can be successful in empowering workers and improving OHS

management. Conversely, a lack of management commitment has been found to be the single most important barrier to WEPR regardless of the intervention, with strong evidence in relation to representation (Garcia et al., 2007; Walters et al., 2012), health and safety committees (Seixas et al., 2013), participatory ergonomics (Burgess-Limerick, 2018) and other forms of OHS management (Robinson & Smallman, 2013).

To bring some relevant themes from this review together:

- Whilst a stated commitment from managers and employers for WEPR is positive, as the Health and Safety Attitudes and Behaviours Survey indicates, it does not necessarily mean that there is sufficient willingness to empower and involve workers.
- The presence of formal WEPR practices may not be sufficient as they are either poorly implemented or are captured as forms of management rather than representation.
- Practices that claim to empower or involve workers but are perceived by workers to be a form of management are unlikely to be effective and may actually harm future interventions as workers become distrustful.

There needs to be a recognition that worker and employer interests in health and safety do not always align.

These issues mean that open negotiation and discussion between employers/managers and workers needs to be encouraged to ensure buy-in from both sides. However, this also needs to be understood in the context of unequal power relations between the two groups. Employers/managers have more power in the workplace setting, and this power imbalance can lead to workers being reluctant to speak up out of fear of job losses or repercussions, even if they have the legal right to do so. It also needs to be understood in the historical context of New Zealand management practices, where employees may have very low expectations of involvement in decision making in many industries (Markey, Harris, Ravenswood, Simpkin, & Williamson, 2015).

WEPR in labour hire and insecure work

KEY FINDINGS

- Addressing employment practices that lead to insecure work is a growing challenge that needs addressing to improve WEPR in New Zealand.
- Insecure work limits workers' avenues for representation and participation and results in fear of repercussion from managers if workers raise OHS issues.

A growing issue in WEPR has been the growth of insecure and outsourced labour practices that provide less security for workers and fewer opportunities for workers to have a voice, variously called insecure work, precarious employment and contingent work (Quinlan, Mayhew, & Bohle, 2001). These new employment practices are often not adequately covered by labour and OHS laws (even taking into account newer, broader legislation) that originated in a mid-20th century paradigm that assumed permanent, full-time work with a single employer (Johnstone et al., 2005).

Insecure work describes a range of highly varied practices such as temping and casual loading, which themselves are often poorly defined (Campbell & Brosnan, 2004). Given this variation, Casey and Alach (2004) caution against assuming that all insecure workers are more disadvantaged or marginalised than their permanent colleagues. However, most studies have found that insecure labour practices are associated with poor health and safety outcomes (Quinlan et al., 2001)[5] and also put added pressure on worker representatives and unions (Underhill & Quinlan, 2011). The Robens style regulatory approach adopted in the

HSWA struggles to address these issues because it “presumed an identifiable and stable workforce able to participate in OHS in a meaningful way; a workgroup employed by a single employer; and health and safety representatives and committees that had regular contact with those workers” (Gallagher & Underhill, 2012, p. 228).

A detailed review of insecure or precarious work is beyond the scope of this review.[6] However, addressing these work practices is likely the largest challenge that needs to be addressed to improve WEPR in New Zealand. These practices have become increasingly more common internationally as a result of loosening labour laws at the end of the 20th century and have resulted in poorer OHS outcomes for many workers. Insecure work is less common in New Zealand than other countries such as Australia. Campbell and Brosnan argue that this is likely due to a combination of permanent employees in New Zealand receiving fewer benefits than in other countries and there being more protections for temporary and casual workers (Campbell & Brosnan, 2004). However, despite this relatively better position for New Zealand workers, insecure work practices have been seen to increase the power imbalance between employers and employees, and also neuter worker avenues for representation and participation both for the workers involved in precarious work by making them fearful of repercussions and for other workers by lowering union coverage (Quinlan et al., 2001).

Furthermore, insecure workers are often heavily affected by labour laws restricting union rights to represent workers or enter workplaces, coupled with a lack of regulation to support alternative forms of representation or meaningful worker participation and fewer protections from arbitrary dismissal (Johnstone et al., 2005; Quinlan et al., 2001, pp. 357–358; Underhill & Quinlan, 2011). There is also evidence that passing responsibility for risk management between host employer and labour hire company is common in Australia (Underhill & Quinlan, 2011).

A focus on precarious labour is also important because, as the Victorian Inquiry into the Labour Hire Industry and Insecure Work recently surmised: “The evidence provided to the Inquiry indicates that some labour hire workers do not exercise their rights to report safety incidents, risks or hazards in the workplace – largely due to concerns that doing so may jeopardise their future engagement at the host’s worksite, or their employment with the labour hire agency. This suggests that the framework for representation and protection of labour hire employees against victimisation for asserting their rights in occupational health and safety matters, by either the labour hire agency or the host, should be as robust as possible. Similarly, labour hire employees should have access to the same rights of representation in relation to occupational health and safety issues as other Victorian employees” (Forsyth, 31 August 2016, p. 21).

Precarious workers are often more fearful of speaking up due to the potential of losing their job, often without the employer needing to provide a justification, and the lack of visible regulator and enforcement to prevent or punish such actions by employers (Johnstone et al., 2005). Underhill argued that this “divide and rule strategy has been remarkably effective in reducing the potential bargaining power of labour hire workers” (Underhill, 2005, p. 532). She found that 17% of workers who had raised a health and safety issue had subsequently lost work as a result. Furthermore, 34% of workers who had never raised a health and safety issue had not done so out of fear of job loss. Several interviewees also felt that there was a tendency for workers who became health and safety representatives to not be offered future contracts.

[5] 76/93 studies identified by the authors found a relationship, 11 were inconclusive/unmeasurable and only 6 found either no or a positive relationship between precarious employment and health outcomes. Various measures of both precarity and of health and safety outcomes were present, but the same trend was evident regardless of measures.

[6] See Johnstone et al. (2005) for a brief discussion.

A hostile environment such as this reduces the possibility for workers to be engaged and, as noted by Tappin et al. (2008) with regards to the New Zealand meat industry, may reduce health and safety (including WEPR) to a bargaining chip in negotiations. Some EU countries, particularly Italy and France, have seen collective agreements and staff representation among temporary work agencies, but this relies on already strong unions and regulatory support (Arrowsmith, 2006). As Lamare et al. have noted in relation to New Zealand, employment law excluded contractors because of a presumption of an equal relationship between contractors. However, the growth of contractors as outsourced workers responsible to a single principal has created a large number of contractors in unequal relationships with principals but not covered by employment law, similar to direct employees. Furthermore, they have noted that many contractors include provisions to terminate the contract if the contractor engages in collective action, puts more responsibility on the contractor and may prohibit the contractor from undertaking certain actions (Lamare, Lamm, McDonnell, & White, 2015).

Quinlan et al. note that traditional OHS regulatory systems often struggle with temporary and insecure work. Whilst inspections and regulations are effective and easy to implement in larger, stable businesses with secure directly employed workforces, they encounter difficulties when applied to transient and insecure workplaces. Micro-enterprises are unlikely to ever be inspected, and employers of temporary workers may also not be inspected, particularly in seasonal industries. In many cases, employers use alternative work practices such as labour hire companies in an attempt to bypassing regulations and requirements. Compensation schemes such as ACC may also struggle to cover insecure workers, especially as many workers face job insecurity for reporting injuries and may also fall into administrative loopholes (Quinlan et al., 2001).

Johnstone et al. (2005) suggest changes to worker representation and participation laws to remove provisions of work groups and to require workers to consult with all forms of precarious workers (which has been implemented in the Australian Capital Territories and New South Wales) as a starting point for addressing the issues raised by precarious work. They suggest that: “In essence, effective legislation requires a careful mix of measures that are enabling and constitutive (covering a wide and dynamic set of contexts) alongside more prescriptive provisions that give meaning to the former” (Johnstone et al., 2005, p. 110).

Removing size restrictions on representation requirements (such as the non-requirement of HSRs in businesses with fewer than 20 employees) may also help (Pashorina-Nichols, 2016; Sissons, 2016). However they suggest that strengthening the powers of HSRs in who they represent, their ability to enter worksites and requirements for their involvement are likely to be more effective in improving OHS in precarious work.

5.0 Conclusion

External, third party representation is likely the best way to improve WEPR in New Zealand since it addresses many of the barriers and challenges to improved WEPR performance.

However, any interventions need to be tailored to specific contexts and to particular workforces.

Given the breadth of the topic, this review is far from comprehensive. Instead, it has aimed to provide a summary of the main themes in the literature that are pertinent to WorkSafe. It has built a picture of current WEPR practices in New Zealand, identified two main types of interventions that may be applicable here and discussed the likely barrier to their success.

As Fidderman and McDonnell (2010) note, one of the ongoing challenges in WEPR is how to prevent it from being both at employers' discretion and following their agenda. Essentially, WEPR needs to overcome the power imbalances between employers and workers that make worker engagement programmes necessary in the first place. External agents such as union representatives or regional health and safety representatives can help mitigate the impact of the power of employers and management, but as the history of RHSRs in New Zealand indicates they can face fierce opposition from business groups (Harris et al., 2012; Pashorina-Nichols, 2016).

Organisation-specific voluntary programmes such as participatory ergonomics may get buy-in from employers who already consider WEPR and occupational health and safety as important, but they are unlikely to reach non-compliant or resistant employers. The results from the National Survey of Employers also suggest that few businesses will enact WEPR practices when they are exempt from legal requirements, and the qualitative data indicate that, even when they have formal practices, these may not be fit for purpose.

National-level programmes built on an external representation mitigate this need and are more likely to have an impact on small and medium enterprises and businesses that are resistant to both OHS and WEPR. If properly implemented, they can also reach insecure workers and receive a positive reception from employers. They do, however, require a combination of legislative support, management commitment, information, training and union involvement to be

successful. It is also important for representatives to have a clear function that is distinct from consultants or health and safety professionals. Such a distinction helps to prevent representatives from becoming overburdened, prevents them from becoming a form of management support and will help to facilitate greater worker buy-in.

This review has also highlighted that the presence of formal structures does not necessarily mean that there are adequate opportunities for workers to be engaged. Such practices may either not be properly implemented or not suitable for particular sectors. Instead, approaches need to understand and address the context of unequal power-relations and historical and current trends in employment practices in order to empower workers and facilitate them improving OHS management in their places of work.

Appendix

IN THIS SECTION:

Appendix A: References

Appendix A: References

Allen, B. (2004). The bridge builders: What now for workers' safety advisers. *Occupational Health Review, 102*, March/April.

Alsamadani, R., Hallowell, M., & Javernick-Will, A. (2012). Measuring and modelling safety communication in small work crews in the US using social network analysis. *Construction Management and Economics, 31*(6), 568–579.

Arrowsmith, J. (2006). Temporary agency work in an enlarged European Union. Luxembourg: European Foundation for the Improvement of Living and Working Conditions.

Batt, R., & Applebaum, E. (1995). Worker Participation in Diverse Settings: Does the Form Affect the Outcome, and if so, who Benefits? Ithaca: Cornell University, School of Industrial and Labor Relations.

Bohle, P., Buchanan, J., Cooke, T., Considine, G., Jakubauskas, M., Quinlan, M., ... Ryan, R. (2008). The evolving work environment in New Zealand. Implications for occupational health and safety. NOHSAC Technical Report 10. Wellington.

Burgess-Limerick, R. (2018). Participatory ergonomics: Evidence and implementation lessons. *Applied Ergonomics, 68*, 289–293.

Buzacott, A., & Berger, Y. (2004). Roving Health and Safety Representatives in Regional Victoria, Geelong: WorkSafe Victoria.

Cameron, I., Hare, B., Duff, R., & Maloney, B. (2006). An investigation of approaches to worker engagement. Norwich: Health and Safety Executive.

Campbell, I., & Brosnan, P. (2004). Why are Casual Employment and Casualisation Less Significant in New Zealand than Australia. *Labour, Employment and Work in New Zealand*. doi: https://doi.org/10.26686/lew.v0i0.1293

Casey, C., & Alach, P. (2004). ‘Just a temp?’ Women, temporary employement and lifestyle. *Work, employment and society*, 18(3), 459–480.

Dale, A., Jaegers, L., Welch, L., Gardner, B., Buchholz, B., Weaver, N., & Evanoff, B. (2016). Evaluation of a Participatory Ergonomics Intervention in Small Commercial Construction Firms. *American journal of industrial medicine*, 59, 465–475.

Delp, L., & Riley, K. (2015). Worker Engagement in the Health and Safety Regulatory Arena under Changing Models of Worker Representation. *Labor Studies Journal, 40*(1), 54–83.

Donado, A. (2015). Why do Unionised Workers Have More Nonfatal Occupational Injuries. *ILR Review, 68*(1), 153–183.

Driessen, M. T., Proper, K. I., Anema, J. R., Knol, D. L., Bongers, P. M., & van der Beek, A. J. (2011). The effectiveness of participatory ergonomics to prevent low-back and neck pain — results of a cluster randomized controlled trial. *Scandinavian journal of work, environment & health, 37*(5), 383-393.

Fidderman, & McDonnall. (2010). Worker involvement in health and safety: what works? Bootle: Health and Safety Executive.

Forsyth, A. (31 August 2016). Victorian Inquiry into the Labour Hire Industry and Insecure Work. Melbourne: Department of Economic Development, Jobs, Transport $ Resources.

Frick, K. (2011). Worker influence on voluntary OHS management systems – A review of its ends and means. *Safety Science, 49*, 974–987.

Frick, K., & Walters, D. (1998). Worker representation on health and safety in small enterprises: Lessons from a Swedish approach. *International Labour Review, 137*(3), 367–389.

Fuller, D., & Suruda, A. (2000). Occupationally Related Hydrogen Sulfide Deaths in the United States From 1984 to 1994. *Journal of Occupational & Environmental Medicine, 42*(9), 939–942.

Gallagher, C., & Underhill, E. (2012). Managing work health and safety: recent developments and future directions. *Asia Pacific Journal of Human Resources, 50*, 227–244.

Garcia, A., Lopez-Jacob, M., Dudzinski, I., Gadea, R., & Rodrigo, F. (2007). Factors associated with the activities of safety representatives in Spanish workplaces. *Journal of Epidemiology and Community Health, 61*, 784–790.

Granzow, K., & Theberge, N. (2009). On the Line: Worker Democracy and the Struggle Over Occupational Health and Safety. *Qualitative Health Research, 19*(1), 82–93.

Hall, A., Forrest, A., Sears, A., & Carlan, N. (2006). Making a Difference: Knowledge Activism and Worker Representation in Joint OHS Committees. *Relations Industrielles, 61*(3), 408–434.

Hammer, L., Truxillo, D., Bodner, T., Rineer, J., Pytlovany, A., & Richman, A. (2015). Effects of a Workplace Intervention Targeting Psychosocial Risk Factors on Safety and Health Outcomes. *BioMed Research International, 2015*.

Harrington, D., Materna, B., Vannoy, J., & Scholz, P. (2009). Conducting effective tailgate trainings. *Health Promotion Practice, 10*(3), 359–369.

Harris, L. (2010). *Health and Safety Representatives' Contributions to Occupational Health and Safety.* Masters, Massey University, Palmerston North.

Harris, L. (2011). Legislation for Participation: an Overview of New Zealand's Health and Safety Representative Employee Participation System. *New Zealand Journal of Employment Relations, 36*(2), 45–60.

Harris, L., Olsen, K. B., & Walker, R. (2012). Role typology for health and safety representatives. *Employee Relations, 34*(5), 481–500.

Haukka, E., Leino-Arjas, P., Viikari-Juntura, E., Takala, E.-P., Malmivaara, A., Hopsu, L., ... Pehkonen, I. (2008). Could a participatory ergonomics intervention prevent musculoskeletal disorders? A randomized controlled trial. *Occupational and environmental medicine*.

Health and Safety at Work Act, New Zealand Parliament (2015).

Health and Safety Executive. (2009). The safe use of vehicles on construction sites. Bootle: Health and Safety Executive.

Henning, R., Warren, N., Robertson, M., Faghri, P., Charniack, M., & The CPH-NEW Research Team. (2009). Workplace Health Protection and Promotion through Participatory Ergonomics: An Integrated Approach. *Public Health Reports, 124*(S), 26–35.

Independent Taskforce on Workplace Health and Safety. (2013). The Report of the Independent Taskforce on Workplace Health and Safety: He Korowai Whakaruruhau. Wellington.

James, P., & Walters, D. (2002). Worker representation in health and safety: options for regulatory reform. *Industrial Relations Journal, 33*(2), 141–156.

Jirjahr, U., & Mohrenweiser, J. (2016). Owner-Managers and the Failure of Newly Adopted Works Councils. *British Journal of Industrial Relations, 54*(4), 815–845.

Johnstone, R., Quinlan, M., & Walters, D. (2005). Statutory Occupational Health and Safety Arrangements for the Modern Labour Market. *The Journal of Industrial Relations, 47*(1), 93–116.

Joss, N., Dupre-Husser, E., Cooklin, A., & Oldenburg, B. (2017). The emergence of integrated approaches to worker health, safety and wellbeing in Australia. *Australian Journal of Primary Health, 23*, 154–161.

Kines, P., Andersen, L. P. S., Spangenberg, S., Mikkelsen, K. L., Dyreborg, J., & Zohar, D. (2010). Improving construction site safety through leader-based verbal safety communication. *Journal of Safety Research, 41*(5), 399–406.

Knowles, D. (2006). Measuring the effect of health and safety advisers and roving safety representatives in agriculture. Norwich: Health and Safety Executive.

Knudsen, H. (2006). *Workplace representation in Denmark – structure and role*. Paper presented at the A Boost for Workplace Democracy in Europe?, Leuven.

Lamare, J., Lamm, F., McDonnell, N., & White, H. (2015). Independent, Dependent, and Employee: Contractors and New Zealand's Pike River Coal Mine Disaster. *Journal of Industrial Relations, 57*(1), 72–93.

Landsbergis, P., & Cahill, J. (1999). The Impact of Lean Production and Related New Systems of Work Organisation on Worker Health. *Journal of occupational health psychology, 4*(2), 108–130.

Lord Robens, Beeby, G., Pike, M., & et al. (1972). Safety and Health at Work: Report of the Committee 1970–72. London.

Lovelock, K., & Houghton, R. (2016). Worker Engagement, Participation, and Representation: A Forestry View. Wellington: WorkSafe New Zealand.

Lunt, J., Bates, S., Bennett, V., & Hopkinson, J. (2008). *Behaviour change and worker engagement practices within the construction sector*. Buxton: Health and Safety Executive.

Markey, R., Harris, C., Knudsen, H., Lind, J., & Williamson, D. (2014). Exploring employee participation and work environment in hotels: Case studies from Denmark and New Zealand. *New Zealand Journal of Employment Relations, 39*(1), 2–20.

Markey, R., Harris, C., Ravenswood, K., Simpkin, G., & Williamson, D. (2015). Employee participation and quality of the work environment: Cases from New Zealand. *New Zealand Journal of Employment Relations, 40*(2), 47–66.

Markey, R., & Patmore, G. (2011). Employee Participation in Health and Safety in the Australian Steel Industry, 1935–2006. *British Journal of Industrial Relations, 49*(1), 144–167.

Masso, M. (2015). The determinants of employee participation in occupational health and safety management. *International Journal of Occupational Safety and Ergonomics, 21*(1), 62–70.

Michie, S., & Williams, S. (2003). Reducing work related psychological ill health and sicness absence: a systematic literature review. *Occupational & Environmental Medicine, 60,* 3–9.

Mylett, T., & Markey, R. (2007). Worker Participation in OHS in New South Wales (Australia) and New Zealand: Methods and Implications. *Employment Relations Record, 7*(2), 15–30.

Nagamachi, M. (1995). Requisites and practices of participatory ergonomics. *International Journal of Industrial Ergonomics, 15*, 371–377.

Nielsen. (2015). *Health and safety attitudes and behaviours in the New Zealand workforce: A survey of workers and employers cross-sector baseline*. Wellington: WorkSafe New Zealand.

Nielsen. (2017). 2016 Health and Safety Attitudes and Behaviours Survey: A survey of workers and employers. Wellington: WorkSafe New Zealand.

Pacheco, G., Morrison, P., Cochrane, B., Blumenfeld, S., & Rosenberg, B. (2016). Understanding Insecure Work. Auckland: Auckland Institute of Technology and Victoria University of Wellington.

Pashorina-Nichols, V. (2016). Occupational Health And Safety: Why And How Should Worker Participation Be Enhanced in New Zealand. *New Zealand Journal of Employment Relations, 41*(2), 71–86.

Popma, J. (2009). Does worker participation improve health and safety? Findings from the Netherlands. *Policy and Practice in Health and Safety, 07*(1), 33–51.

Quinlan, M., Mayhew, C., & Bohle, P. (2001). The Global Expansion of Prevarious Employment, Work Disorganization, and Consequences for Occupational Health: A Review of Recent Research. *International Journal of Health Services, 31*(2), 335–414.

Reilly, B., Paci, P., & Holl, P. (1995). Unions, Safety Committees and Workplace Injuries. *British Journal of Industrial Relations, 33*(2), 275.

Rivilis, I., Van Eerd, D., Cullen, K., Cole, D. C., Irvin, E., Tyson, J., & Mahood, Q. (2008). Effectiveness of participatory ergonomic interventions on health outcomes: a systematic review. *Applied ergonomics, 39*(3), 342–358.

Robinson, A., & Smallman, C. (2013). Workplace injury and voice: a comparison of management and union perceptions. *Work, employment and society, 27*(4), 674–693.

Robson, L. S., Clarke, J. A., Cullen, K., Bielecky, A., Severin, C., Bigelow, P. L., … Mahood, Q. (2007). The effectiveness of occupational health and safety management system interventions: a systematic review. *Safety Science, 45*(3), 329–353.

Safe Work Australia. (2017). Leadership and culture, from www.safeworkaustralia.gov.au/leadership-culture

Seixas, N., Crollard, A., Neitzel, R., Stover, B., & Dominguez, C. (2013). Intervening at the Bottom: Can a Health and Safety Committee Intervention Influence Management Commitment? *Policy and Practice in Health and Safety, 11*(1), 61–78.

Shannon, H. S., Walters, V., Lewchuck, W., Richardson, J., Moran, L. A., Haines, T., & Verma, D. (1996). Workplace organizational correlates of lost-time accident rates in manufacturing. *American Journal of Industrial Medicine, 29*: 258-268

Shaw, N. T., & Turner, R. (2003). The Worker Safety Advisors (WSA) pilot. Norwich: Health and Safety Executive.

Shchaufeli, W. (2013). What is Engagement? In C. Truss, A. Delbridge, A. Shantz & E. Soane (Eds.), *Employee Engagment in Theory and Practice*. London: Routledge.

Sissons, J. (2016). A Bad Day at the Sausage Factory: The Health and Safety at Work Act 2015. *New Zealand Journal of Employment Relations, 41*(2), 58–70.

Statistics New Zealand. (2014). Flexibility and security in employment: Findings from the 2012 Survey of Working Life. Wellington: Statistics New Zealand.

Suruda, A., Whitaker, B., Bloswick, D., Philips, P., & Sesek, R. (2002). Impact of the OSHA Trench and Excavation Standards on Fatal Injury in the Construction Industry. *Journal of occupational and environmental medicine, 44*(10), 902–905.

Tappin, D, Bentley, T & Vitalis, A (2008) The role and contextual factors for musculoskeletal disorders in the New Zealand meat processing industry, Ergonomics, SS(10), IS 76-1593.

Underhill, E. (2005). The importance of having a say: Labour hire employees' workplace voice. *AIRAANZ*, 527-536.

Underhill, E., & Quinlan, M. (2011). How precarious employment affects health and safety at work: The case of temporary agency workers. *Industrial Relations Journal, 66*(3), 397–421.

Van der Molen, H. F., Sluiter, J. K., Hulshof, C. T. J., Vink, P., Van Duivenbooden, C., Holman, R., & Frings-Dresen, M. (2005). Implementation of participatory ergonomics intervention in construction companies. *Scandinavian Journal of Work and Environmental Health, 31*(3), 191–204.

Van Eerd, D., Cole, D., Irvin, E., Mahood, Q., & Keown, K. (2006). Participatory ergonomic interventions: implementation and process evaluation. An interim report. Toronto: Institute for Work & Health.

Van Eerd, D., Cole, D., Irvin, E., Mahood, Q., & Keown, K. (2008). Report on process and implementation of participatory ergonomic interventions: a systematic review. Volume 1. Toronto: Institute for Work & Health.

Walters, D. (2000). The role of worker representation in health and safety in agriculture in Western Europe. *Labour Education, 2000*(2), 84–96.

Walters, D. (2004a). Making things work: strategies for effective worker representation on health and safety in small firms in Europe. *Policy and Practice in Health and Safety, 2*(1), 53–73.

Walters, D. (2004b). Worker representation and health and safety in small enterprises in Europe. *Industrial Relations Journal, 35*(2), 169–186.

Walters, D. (2010). The role of Worker Representation and Consultation in Managing Health and Safety in the Construction Industry Cardiff: International Labour Organisation.

Walters, D., & Frick, K. (2000). Worker Participation and the Management of Occupational Health and Safety: Reinforcing or Conflicting Strategies? In K. Frick (Ed.), *Systematic Occupational Health and Safety Management: Perspectives on an International Development*. Oxford: Pergamon Press.

Walters, D., Nichols, T., Connor, J., Tarsiran, A., & Cam, S. (2005). The role and effectiveness of safety representatives in influencing workplace health and safety. Cardiff: Health and Safety Executive.

Walters, D., Quinlan, M., Johnstone, R., & Wadsworth, E. (2016). Cooperation or resistance? Representing workers' health and safety in a hazardous industry. *Industrial Relations Journal, 47*(4), 379–395.

Walters, D., Wadsworth, E., Hasle, P., Refslund, B., & Ramioul, M. (2018). Safety and Health in micro and small enterprises in the EU: Final report from the 3-year SESAME project: EU-OSHA. Bilboo: European Agency for Safety and Health at Work.

Walters, D., Wadsworth, E., & Marsh, K. (2012). *Worker representation and consultation on health and safety: An analysis of the findings of the European Survey of Enterprises on New and Emerging Risks* (ESENER). Luxembourg: European Agency for Safety and Health at Work.

Weil, D. (1992). Building Safety: The Role of Construction Unions in the Enforcement of OSHA. *Journal of Labour Research, 13*(1), 121–132.

WorkSafe. (2017). *WorkSafe Position on Worker Engagement, Participation and Representation*. (WSNZ_2370_JUN17). Wellington.

Zohar, D., & Luria, G. (2010). Group Leaders as Gatekeepers: Testing Safety Climate Variations across Levels of Analysis. *Applied Psychology: An International Review, 59*(4), 647–673.

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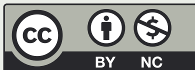

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