



Role Typology for Health and Safety Representatives

Journal:	<i>Employee Relations</i>
Manuscript ID:	ER-Jun-2011-0029.R1
Manuscript Type:	Research Paper
Keywords:	Employee participation, occupational health and safety, health and safety representative, Employee relations, impact ladder, Laws and legislation

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Role typology for health and safety representatives

Structured abstract

Purpose

Focuses on the development of a health and safety (HS) representative role typology that demonstrates how representatives enact their roles and improve occupational health and safety (OHS) under New Zealand law. Consideration is given to the factors that influence the roles that HS representatives' assume.

Design

This qualitative, cross perceptual study centres on the role enactments of eight HS representatives at two metal manufacturers. Semi-structured interviews were conducted with HS representatives, managers, workers, senior managers, OHS managers and a union convenor. 'Types' were differentiated by the HS representatives' purpose, activities and OHS impacts.

Findings

Four HS representative role 'types' were identified: administrators, workshop inspectors, problem solvers and craft experts. Administrators implemented and operated OHS management systems and improved OHS management. Workshop inspectors undertook compliance and monitoring roles and improved workers' attitudes towards OHS. Problem solvers found solutions to control hazards and improved production from an OHS perspective. Craft experts applied technical knowledge to influence strategic OHS decisions. Role enactment appeared to be influenced by representatives' expert power, job roles and the organisational role definition. Representatives operating under both managerial and worker defined HS representative systems, increased worker 'voice' by providing an avenue to redress OHS concerns.

Implications

Implications arise for OHS policy, HS representative training courses and organisational/managerial support.

Originality

A HS representative role typology distinctively based on cross-perceptual data that also provides a more holistic perspective of the HS representative role by considering representatives' purpose, role enactment and OHS impact.

Keywords: employee participation, occupational health and safety, health and safety representative, employee relations, impact ladder, laws and legislation

Article classification: research paper

Introduction

Employee participation is a cornerstone of systematic occupational health and safety management (OHSM), now the dominant legislative strategy for improving workplace health and safety across industrialised nations. Under OHSM, employers are responsible for OHS and should adopt systematic processes to manage hazards (Frick *et al.*, 2000). Employee participation is required because “managers simply do not know or control the production base of OHS in enough detail to do without the experience, competence and motivation of workers to detect and abate hazards” (Walters and Frick, 2000, p.44). Consequently, international covenants, such as the European Union Framework Directive 83/391, and legislative reforms across developed countries have sought to strengthen employee participation in OHS, particularly via promotion of HS representatives; workers mandated to represent workers’ interests in relation to health and safety (Walters, 2005).

HS representative’s rights vary between jurisdictions. At a minimum, representatives commonly have the right be chosen by workers, time off to attend specialist training and to perform OHS tasks, access to health and safety information and specialist advice, consult with employers and OHS inspectors, investigate worker complaints and protection from discrimination (Walters and Frick, 2000). Given that inspectorates are often unwilling to enforce legal provisions for employee participation (Garcia *et al.*, 2007; Walters and Frick, 2000; Walters and Nichols, 2006), HS representative’s access to their rights is dependent on the propensity of management to give the legislation effect (Walters, 2005). Walters (2005) found that organisations tend to treat legislative rights as a ‘list’ from which to choose rather than a minimum standard on which to build, and that representatives do less than what is prescribed by regulations (Walters and Nichols, 2006). This signals the importance of evaluating how the HS representative role is interpreted and implemented in organisations, and how workers who assume this position enact their OHS roles for the improvement of health and safety.

HS representatives’ role performance is commonly evaluated via questionnaire surveys. These studies are often descriptive, simply stating the percentage of HS representatives found to perform specific OHS tasks. Findings from numerous countries suggest that representatives tend to be operationally focused. Studies include those from Australia (Gaines and Biggins, 1992), Britain (Hillage *et al.*, 2000), Canada (Brun and Loiselle, 2002), New Zealand (Johnson and Hickey, 2008), Spain (Garcia *et al.*, 2007) and Sweden (Tragardh, 2008). However, representatives’ role focus differs between countries. For instance, Australian representatives primarily ensured workers acted safely by encouraging compliance with safety rules (Gaines and Biggins, 1992) while their New Zealand counterparts motivated workers to report pain (Johnson and Hickey, 2008). Differences in the activities of representatives across jurisdictions may be attributable to discrepancies in study focus and design or the influence of macroeconomic factors, such as variations in legal prescription of the role or promotion of specific role interpretations by industry organisations and trade unions.

Methodological approaches affect the type of information available about HS representatives. Questionnaire surveys, for examples, elicit useful ‘snapshots’ of representatives’ activities, but do not consider how role enactment is influenced by contextual conditions, particularly how the role is interpreted and constructed. Further, questionnaire studies generally provide limited insight into why representatives’ enact the role in a particular way and how their participation affects OHS outcomes.

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Qualitative research, relying on interview data from HS representatives, provides opportunity for richer and more advanced insight into representatives' role enactment (Hall *et al.*, 2006; Hasle and Jensen, 2006; Walters, 1985; Walters, 1987; Wright and Spaven, 1999). Some of these studies have created typologies to characterise HS representatives' roles, which simultaneously demonstrate the multiple interpretations of the role and simplify complex data by distilling similar HS representative characteristics into identifiable 'types'. These frameworks enable the comprehension of some major elements of the HS representative role within a specified context. Yet by emphasising certain elements, others may be masked that could provide a more nuanced understanding of the role. A United Kingdom study in the offshore oil and gas industry, with its particularly unique employment relations conditions, developed a typology based the representatives' motives for taking on the role (Wright and Spaven, 1999). A Canadian study, focusing on particularly active HS representatives in auto plants, developed a typology describing representatives' political strategies and subsequent OHS impacts (Hall *et al.*, 2006). Given that these typologies focus on extraordinary cases, the type-castings may illustrate unique rather than 'ordinary' approaches to the HS representative role.

This paper addresses some of the short-comings of quantitative studies and extends the scope of existing qualitative studies on the HS representative role. The purpose is to demonstrate how HS representatives enact their roles and contribute to health and safety under New Zealand's flexible Health and Safety in Employment (HSE) Amendment Act 2002. Distinctively, we consider factors that appear to influence the roles that HS representatives assume.

We outline New Zealand's flexible regulatory framework within which HS representatives are appointed and operate. The method used to investigate representatives' roles is described, and findings are presented via two organisational case studies. Each case study outlines how the organisation interpreted and implemented provisions for employee participation, and how different representatives enacted their roles and impacted on OHS. To characterise differences, HS representatives were grouped into 'types' that describe their purpose, activities and OHS impacts. Emerging from this analysis is a new typology that captures a range of representatives' roles. We provide insight into organisational and individual factors that appeared to influence the adoption of specific roles, and discuss implications of the findings.

New Zealand's regulatory framework for employee participation in OHS

New Zealand's principal OHS statute, the HSE Act 1992, obliges employers to adopt a systematic OHSM strategy (Frick and Wren, 2000), but provisions for employee participation were initially weak (Jeffrey, 1995). Although employers had a general duty to provide workers with opportunities to assist with hazard management, these provisions were unenforceable (Harcourt, 1996). Introduction of the HSE Amendment Act ameliorated the situation by stipulating that businesses with more than 30 employees (or otherwise at the request of a worker or their representative) establish an employee participation system. There is no prescribed system that businesses should adopt, but management and workers must agree how the system should be designed, implemented and reviewed. Businesses can tailor a system to suit the organisation so long as management and workers co-operate in good faith. They can, for instance, decide whether workers will participate in OHS directly with management and/or via representative channels, such as HS representatives and/or OHS committees (DoL, 2002). If parties cannot agree, they must adopt the HSE Amendment Act's 'default system' (Schedule 1A).

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3 HS representatives are central to the default system and are defined as “an employee elected,
4 as an individual or as a member of a health and safety committee or both, to represent the
5 views of employees in relation to health and safety at work” (s.2). Democratic election of
6 representatives is encouraged and the number of representatives should be determined by
7 employee count and organisational factors such as type(s) of work, work sites and work
8 organisation (e.g. shift work). According to the default system, HS representatives should:

- 9 • foster positive OHS management,
- 10 • participate in hazard management,
- 11 • attend OHS committee meetings,
- 12 • consult with OHS inspectors and
- 13 • represent workers’ OHS interests, particularly in relation to rehabilitation and return
14 to work.

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19 The HSE Amendment Act, thus, establishes opportunities for employees to participate in
20 OHS by outlining roles and functions of HS representatives in New Zealand where workers
21 have traditionally had few rights to participate in OHS (Harris, 2004). Despite the
22 significance of this legislative development, little is known about how HS representatives
23 participate in workplace health and safety (Harris, 2010; Lamm, 2010). Notably, there is a
24 dearth of qualitative research into how HS representatives enact the role under this relatively
25 new legislation.
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28 **Method**

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30 This qualitative, cross perceptual study centres on the role enactments of eight HS
31 representatives within two New Zealand metal manufacturers. Data collection occurred
32 primarily via semi-structured interviews.
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34 *Case studies of metal manufacturing businesses*

35 A case study approach enabled the HS representative role to be explored contextually (Yin,
36 2009) within organisations’ OHS employee participation systems. Two businesses were
37 selected within the same industry sector to limit the influence of external contextual
38 variables.
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42 Metal manufacturing was chosen because it is known internationally for its advanced
43 arrangements for employee participation in OHS (Eaton and Nocerino, 2000; Istituto Per Il
44 Lavoro, 2006; Leopold and Beaumont, 1982). In New Zealand, HS representatives are also
45 regarded as an important mechanism to improve OHS by the tripartite Metal Manufacturing
46 Safer Industry Group (ACC, n.d.).
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49 *Participants*

50 Members of the Safer Industry Group were asked to identify metal manufacturers perceived
51 to be committed to employee participation in OHS. Health and safety managers at four of the
52 identified businesses were invited to participate in the study; two accepted the invitation.
53 Across both businesses, participation was gained from eight representatives and 23 other
54 organisational actors shown to influence the HS representative role, including senior
55 managers, a union convenor, OHS managers, line managers and workers.
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58 At each business, the OHS manager recruited a senior manager, a union convenor (at the
59 unionised organisation) and four HS representatives. OHS managers were asked to choose
60 representatives perceived to enact the role differently from each other. Three of the four
representatives recruited their line managers and two co-workers with whom they shared a

rapport and/or who were available for interview, and were thus likely to have an informed perspective on the HS representative role.

Data collection method

Face-to-face semi-structured interviews (King, 2004) enabled the exploration of participants' perceptions (Barriball and While, 1994). See Harris (2010) for full interview schedules.

Interviews with senior management, OHS management and the union convenor focused on organisation and management, trade union organisation, management commitment and responsibility for OHS and the health and safety employee participation system. Main themes from interviews with HS representatives, line managers and workers related to the purpose of HS representatives, their activities, role facilitators, role barriers and OHS impacts.

At Business A, interviews were conducted in offices or 'smoko' rooms and ranged from 10 minutes to just over an hour. Business B's interviews were held confidentially in meeting rooms at the Human Resources Section and each took from 20 minutes to two hours.

Data analysis

Interview transcripts were thematically analysed (Braun and Clarke, 2006) using a pre-determined coding schedule. To place the HS representatives' participation in context, we drew on the data from senior managers, OHS managers and a union convenor.

HS representatives' perceptions were compared to those of their manager's and co-workers' in relation to each theme. This data triangulation (Mathison, 1988) enabled a more accurate picture of HS representatives' roles. Analysis of the similarities and differences between the representatives' purposes, activity profiles and OHS impacts formed the basis on which the 'types' were constructed.

Representatives' activity profiles were differentiated using Brun and Loisel's (2002) OHS practitioner role framework. This enables the categorisation of OHS practitioners' work according to the level (operational versus strategic) and dimension (organisational, technical, human) at which they focus their preventative efforts (see Figure 1).

Figure 1. Brun and Loisel's (2002) framework to profile activities of OHS practitioners with examples of activities

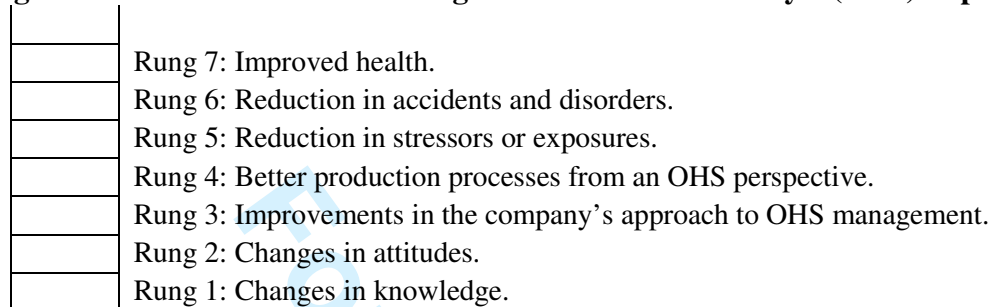
	Organisational	Technical	Human
Strategic	<ul style="list-style-type: none"> Develop OHS policies. Develop annual prevention budget. 	<ul style="list-style-type: none"> Influence strategic decisions via the provision of technical advice. Develop standards for the use of equipment. 	<ul style="list-style-type: none"> Foster worker participation in OHS. Make senior management aware of workers' OHS concerns.
Operational	<ul style="list-style-type: none"> Investigate accidents. Ensure OHS policies and procedures are correctly applied. 	<ul style="list-style-type: none"> Research ways of resolving technical OHS issues. Conduct risk analyses. 	<ul style="list-style-type: none"> Train workers in safe work methods. Discuss OHS issues with workers.

New Zealand HS representatives' OHS impacts were evaluated using the Danish National Working Environment Authority's (2002) impact ladder (see Figure 2). This model conceptualises how OHS interventions can impact on various levels ranging from changes in

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people's knowledge (rung 1) and attitudes (rung 2), to improvements in a company's approach to OHS management (rung 3), better production processes from an OHS perspective (rung 4), reduced stressors and exposures (rungs 5), reduced accidents and disorders (rung 6) and improved health (rungs 7). We chose to focus the impact measurement on rungs 1-5 because of the difficulties establishing causal relations between worker participation and variables in rungs 6 and 7 (for more on these methodological difficulties see Nichols *et al.*, 2004).

Figure 2. Danish National Working Environment Authority's (2002) impact ladder



This analytical process enabled the classification of eight representatives into four semi-distinct representative 'types'. While 'types' overlap, they show that representatives tend to certain OHS activities more strongly than others. Each type was labelled to reflect the representatives' dominant OHS strategies; the strategies they use to prevent injuries and improve OHS.

Case study 1: Business A's results

Business A began operating in the 1960s as a small steel fabrication firm, but expanded rapidly in the mid-2000s by increasing staff numbers and acquiring small fabrication firms. The business comprised five semi-autonomously operated firms trading under different names and employed 120 non-unionised staff. Nearly 80 employees were located at the head office, and the other four firms were akin to small businesses with between 6 and 12 staff.

Managers appointed at each firm had the right to make operational decisions, but an effort was being made to align OHS policy and practice across the organisation. However, top management had not assigned formal OHS responsibilities to the unit's managers. Managers' were assisted by secretaries and foremen. Production workers included tradesmen, apprentices and labourers.

Business A's commitment to OHS was driven by an economic imperative. According to the OHS manager, the business recently implemented rudimentary OHS management systems to achieve a 'primary' standard under the Workplace Safety Management Practices programme (WSMP¹) to secure a 10% reduction on accident compensation levies.

Business A's employee participation system, introduced to facilitate compliance with the WSMP and HSE Amendment Act, was determined unilaterally by the OHS manager. Workers were given opportunities to participate in OHS directly with management (e.g. staff meetings) and via representative channels, including an OHS committee and HS representatives. On deciding the HS representative's functions, the OHS manager

¹ WSMP is the Accident Compensation Corporation's accreditation scheme that uses economic incentive to motivate businesses to improve OHS management systems.

communicated her expectations to the seven representatives at committee meetings. The following quote illustrates the OHS manager's interpretation of the HS representative's purpose:

If workers have any problems, or see any possible hazards, they have got someone to talk to about it, so that they're not feeling like they have to come and see the boss or see their foreman or whatever and feel like they're complaining... [Additionally] the reps know they are responsible for the safety and well-being of everybody on site or wherever they are.

HS representatives were expected to undertake activities outlined in the HSE Amendment Act's default section and asked to agree to:

- monitor workers' compliance with safety policy and inform management of breaches,
- report and investigate accidents,
- attend OHS committee meetings and
- update emergency evacuation information (only the representatives based in offices).

Characteristics of the interviewed HS representatives are presented in Table 1. Two were secretaries and the others were based in workshops as a general labourer and a fitter-welder. All represented workers on the shop floor and had been employed at the business for five years or less. Two could be considered experienced HS representatives (3-5 year tenures) while the others held the role for only a few months. All had been asked by management to fill the position.

Table 1. Characteristics of Business A's HS representative sample

	Job role	Unit	Gender	Tenure at A (years)	Tenure as HS representative at A
A1	Secretary	Structural steel fabricators	F	3	3 years
A2	Secretary	Farming shed manufacturers	F	1	4 months
A3	Labourer	Structural steel fabricators	M	5	5 years
A4	Fitter-welder	Structural steel fabricators	M	5	4 months

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4 Table 2 depicts the activities of Business A's representatives in relation to the employee
5 participation system and default legislation. None had interacted with the inspectorate and
6 only one had participated in the rehabilitation process. All attended OHS committee
7 meetings, monitored workers' adherence to safety policy and participated in hazard
8 management.
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Table 2. Activities of Business A's HS representatives in relation to the activities in which they were expected to participate

How HS representatives are expected to participate:		A1 Secretary	A2 Secretary	A3 Labourer	A4 Fitter-welder	
A's employee participation system	Default legislation	Identify and inform management of hazards	✓	✓	✓	✓
		Discuss ways to control hazards with management	✓	✓	✓	
		Consult with inspectors				
		Participate in rehabilitation and return to work processes	✓			
	A's employee participation system	Monitor workers' compliance with safety policies	✓	✓	✓	✓
		Report and investigate accidents	✓	✓	✓	
		Update emergency evacuation information	✓	✓	N/A	N/A
	Attend OHS committee meetings	✓	✓	✓	✓	

Key: ✓ activities in which HS representatives participated

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3 Table 2 suggests that representatives were doing the same activities, there were notable
4 similarities and differences in the way they participated in hazard management. Secretaries
5 identified hazards by examining accident reports and statistics and facilitated hazard control
6 in an administrative capacity (e.g. completed OHS related paperwork and sourced
7 information on codes and regulations). The labourer and fitter-welder detected hazards during
8 production and primarily participated in hazard control by informing workers of OHS
9 policies and procedures and monitoring conformance. To exemplify these differences in role
10 enactment, representatives were typecast as ‘administrators’ and ‘workshop inspectors’.

11 12 13 *Administrator HS representative ‘type’*

14 Two HS representatives, employed to provide secretarial support to their unit’s managers (A1
15 and A2), were classified as administrators because of their focus on the implementation and
16 operation of OHS management systems. Both perceived that their purpose was to improve
17 health and safety by preventing accidents through administering their unit’s OHS
18 management systems: “it’s really about putting systems and processes in place to prevent
19 accidents” (A2). This quote reflected their managers’ rather than their constituencies’
20 understandings of the HS representative’s purpose. Whilst the general consensus amongst
21 workers was that representatives should “solve problems that we might have with health and
22 safety” (A1’s co-worker), managers suggested that representatives were responsible for the
23 administration of OHS and viewed the role as an extension of their secretarial positions. For
24 instance, A2’s manager stated:
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27 The rep takes care of everything. She’s like the boss when it comes to health and safety
28 ...I’m no good at office work. She deals with health and safety office work and the basic
29 office work; more or less the administrator.
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32 Administrators’ activities predominantly fall within the organisational-operational level of
33 Brun and Loiselle’s (2002) framework. They mainly applied OHS policies by ensuring
34 workers identified and documented hazards, verified management conducted OHS induction
35 training, investigated accidents, compiled internal OHS statistics, sourced external
36 compliance information and represented management in the rehabilitation of injured workers.
37 Although representatives and their managers emphasised the administrator’s organisational
38 focus, workers’ perspectives indicated that representatives also enacted the role within the
39 human dimension. Notably, they encouraged workers to raise OHS concerns and drew on
40 their colleagues’ knowledge to facilitate hazard management. Both administrators were
41 dependent on others to determine hazard controls because of a lack of expertise and isolation
42 from the work process:
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45 At this stage, I’m relying on my boss for that [hazard management]. A lot of the
46 machinery I don’t know the correct operation for. It’s all written down, but it’s still too
47 new... It’s also hard for me to be in here [the office] doing administration and to know
48 what’s happening in the workshop. (A2)
49

50 Both administrators impacted on multiple rungs of the Danish National Working
51 Environment Authority’s (2002) impact ladder. The administrator’s managers praised them
52 for efficiently managing OHS (rung 3). In particular, A1’s co-workers felt that the
53 representative improved the system by giving workers greater opportunities to participate in
54 OHS by proving more avenues to raise OHS issues (rung 3) and increased their awareness of
55 hazards (rung 1). Further, representative A2 and her co-workers provided examples of how
56 she contributed to the improvement of the production process from an OHS perspective (rung
57 4). For instance, she initiated the marking of workshop walkways and purchased cages to
58 isolate gas bottles.
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3 Overall, administrators had the greatest impact on the health and safety management systems
4 level (rung 3). Notably, they facilitated the implementation and operation of OHS
5 management systems in small business units that previously managed OHS in an informal
6 and ad hoc manner. In effect, administrators' facilitated accreditation of their unit's OHS
7 management systems to a basic standard under the WSMP thereby yielding economic
8 savings.
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10 11 *Workshop inspector HS representative 'type'*

12 Business A's other two representatives, who worked respectively as a tradesman and a
13 labourer on the shop floor (A3 and A4), are classified as workshop inspectors because they
14 perceived their purpose was to improve safety by informing workers of OHS obligations and
15 monitoring compliance. Like administrators, workshop inspectors' role purpose aligned with
16 the expectations of management more than workers. Workers expected representatives to
17 resolve their OHS concerns, but management emphasised how they should facilitate
18 conformance with OHS policy:
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21 I can't be here all the time so you've got to have another 'pair of eyes'. If something is
22 judged as unsafe or they [workers] are having issues with something, it's for the rep to
23 say "Let's get it sorted out" ... Small things he can sort out, but if things escalate then the
24 issue should come to me. We have a sparky [electrician] that has a history of not wearing
25 eye protection. It's for the rep to say, "Hey, I've told him twice, can you do something
26 about it?" (A3's manager)
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29 Workshop inspectors' primarily worked at the operational level in the human dimension of
30 Brun and Loiselle's (2002) model. All interviewees agreed that representatives reminded
31 colleagues of OHS obligations and ensured they 'stick to the rules'. For instance, during his
32 interview, the labourer spoke at length of his efforts to promote compliance with policy
33 mandating the use of overalls in the workshop. He reminded colleagues to wear overalls
34 correctly and asked non-compliant contractors to leave the workshop.
35

36 Workshop inspectors and co-workers implied that they mainly impacted on the lower rungs
37 of the impact ladder by improving workers' attitudes toward OHS (rung 2). Namely, they
38 increased safety consciousness and willingness to comply with safety policy. Interestingly,
39 one of the workshop inspectors was perceived by workers to have impacted negatively on
40 workers' attitudes because he violated safety rules thereby harming the OHS organisation's
41 image. Additionally, this representative potentially increased workers' exposure to hazards by
42 insisting workers wear overalls, which they claimed caused heat stress. Paradoxically,
43 workers felt that the same representative provided opportunities to discuss OHS concerns
44 (rung 3), which was beneficial: "*sometimes you feel easier to talk to someone you work with on the*
45 *floor all day everyday than sort of come up and... have a whinge and moan to the management.*"
46 (A3's co-worker)
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49 **Case study 2: Business B's results**

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51 Business B was established in the 1960s and is a major producer of metal materials. The
52 business was organised into functional areas with a hierarchical management structure, and
53 employed over 1,000 permanent staff. Most of Business B's employees were skilled
54 labourers and tradespeople, and approximately 83% were unionised.
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57 Business B's bond articulated a strong commitment to OHS, and the company had a
58 comprehensive OHS management system accredited to the highest standard under the
59 WSMP. The OHS manager confirmed that all managers had OHS responsibilities in their job
60 descriptions and safety was as a key performance indicator. One of the criteria on which
managers were assessed, related to their ability to encourage workers to participate in OHS

via “*safety audits*” (system to log OHS information, such as hazards and positive/negative safety behaviours).

Business B’s OHS employee participation system included mechanisms for direct and representative worker participation. Senior management gave primacy to the direct systems because they facilitated the participation of *all* employees. In contrast, the union convenor emphasised the importance of representative channels for worker participation. Unions established a HS representative system at the organisation in the early 1970s. Yet, the HSE Amendment Act prompted the formalisation and expansion of this system beyond the unionised workforce. The HS representative system was negotiated between management and unions, and documented in the ‘Health and Safety Participation Agreement’. Although findings suggest details of this agreement were not well known, it outlined a comprehensive system of HS representatives and committees.

According to the agreement, representatives should act as an OHS “*resource*” for workers with the default system serving to define their activities. The agreement further obliged representatives to:

- facilitate the networking of OHS information,
- lead and support safety audits,
- assist in accident and incident investigations,
- contribute to local OHS projects or initiatives,
- assist in the development and review of OHS objectives and policy and
- attend OHS committee meetings.

The company’s 146 representatives were elected by workgroups to represent their interests at local OHS committee meetings. Representatives from one area chose an ‘elected representative’ to attend the central OHS committee meeting. All representatives were entitled to participate in the organisation’s 15-18 risk reduction committees, which focused on the strategic review and development of policies for particular hazards.

Characteristics of Business B’s representatives are presented in Table 3. Three representatives were trades people with technical job roles and one was a plant operator, with qualifications and experience as a nurse and fire fighter. Most volunteered for the position and represented 2-20 colleagues who did similar types of work. The representatives had long tenures at the organisation (3-31 years) and as HS representatives (up to 12 years). B1 and B2 had also been representatives in previous organisations for up to five years.

Table 3. Characteristics of Business B’s HS representative sample

	Job role	Department	Gender	Tenure at B (years)	Tenure as HS representative at B
B1	Plant operator	Metal coating	M	3	6 months
B2	Electrician	Maintenance	M	12	6 months
B3	Instrument serviceman	Maintenance	M	31	12 years
B4	Electrical technician	Maintenance	M	21	8 years

Table 4 depicts the activities of Business B’s representatives in relation to the functions they were expected to undertake according to the participation agreement and default legislation. There was no or minimal involvement in rehabilitation and return to work processes, consultation

with OHS inspectors or accident investigations. Instead, representatives focused on networking OHS information, attending OHS committee meetings and participating in hazard management.

Table 4. Activities of Business B's HS representatives in relation to the activities in which they were expected to participate

How HS representatives are expected to participate:		B1 Plant operator	B2 Electrician	B3 Instrument serviceman	B4 Electrical technician	
B's employee participation agreement	Default legislation	Identify and inform management of hazards	✓	✓	✓	✓
		Discuss ways to control hazards with management	✓	✓	✓	✓
		Consult with inspectors				
	Participate in rehabilitation and return to work processes					
	Attend OHS committee meetings	✓	✓	✓	✓	
	Facilitate networking of OHS information	✓	✓	✓	✓	
	Lead and support safety auditing	✓		✓		
	Assist with accident investigations				✓	
	Contribute to local OHS projects or initiatives					
	Assist in the development and review of OHS policy	✓		✓	✓	

Key: ✓ activities in which the HS representatives participated

Despite the apparent similarities in the HS representatives' activities, there were differences in representatives' participation in hazard management. Representatives B1 and B2 focused on controlling hazards by networking with others to determine and implement technical solutions. Representatives B3 and B4 primarily participated in hazard management by contributing knowledge at risk reduction committee meetings. On the basis of these differences, Business B's four HS representatives were typecast as 'problem solvers' and 'craft experts'.

Problem solver HS representative 'type'

The two HS representatives categorised as 'problem solvers' worked close to the production process as a plant operator and electrician (B1 and B2). HS representatives, managers and co-workers agreed that the representatives' purpose was to facilitate the hazard management process by helping to provide practical solutions. For instance, problem solver B2 asserted: "If someone raises an issue, you do something about it. You go to who you think could deal with it or who should be informed about it."

Problem solvers primarily enacted their roles within the technical-operational dimension of Brun and Loiselle's (2002) typology by seeking technical solutions to manage hazardous situations. Representatives' personal narratives indicated that they formed coalitions with management and/or workers who had expertise, technical skills and/or authority to remedy safety problems. For instance, the electrician stated:

When I had a problem with poor lighting, I got the production involved and one of the guys I work with. He loves projects like that so you'd say 'right, what light do we need

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3 for down here?’ And he’d get the [suppliers] book out [and find a light]. He actually
4 sorted that.
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7 In this particular instance, the HS representative was able to resolve an OHS concern without
8 involving management. When hazard controls required managerial approval, representative
9 B1 presented management with proposals framed to appeal to their interests:

10 I put myself in management’s shoes. I thought, well, what’s going to convince them to
11 change this? When you look at health and safety improvements, you’ve got to look at
12 costs and profit and prevention of injuries, so as long as you encompass that sort of thing
13 in any report you do there’s a good chance that they’ll [management] see the value of it.
14

15 Problem solvers impacted on multiple rungs of the impact ladder, but most significantly
16 improved the production process from an OHS perspective (rung 4). Following the
17 submission of a proposal to management, representative B1 initiated the reengineering of a
18 section of the production line, eliminating the need for heavy lifting which reduced the risk of
19 musculoskeletal injury (rung 5). Representative B2 also improved production by facilitating
20 the installation of lighting in a dark area of the plant. Further, management and workers
21 agreed that problem solvers were instrumental in improving workers’ attitudes to safety
22 policy (e.g. increased willingness to complete safety audits). Finally, both problem solvers
23 improved OHS management (rung 3) by facilitating the networking of OHS information
24 between workers, management and OHS committees. Workers emphasised that
25 representatives improved the system by providing a legitimate channel to articulate OHS
26 concerns:
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29 With any big business there’s a very ‘us and them’ mentality between the work group and
30 the management. Obviously there’s always going to be conflict between them so to have
31 ... somebody who can represent your side of an argument at your level, is probably very
32 value-adding for us. (B2’s co-worker)
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35 Overall, problem solver B1 had a greater impact than B2 in that he was also found to have
36 improved workers’ knowledge. Workers perceived that the representative increased their
37 knowledge of health effects associated with chemical exposure and protective measures (rung
38 1). Consequently, workers were more willing to wear PPE and were confident being in
39 proximity to chemicals (rung 2). Workers suggested that this representative’s ‘special’ ability
40 to educate was attributable to his knowledge and skill as a nurse and fire-fighter.
41

42 43 *Craft expert HS representative ‘type’*

44 Business B’s ‘craft experts’ implied that their purpose was to facilitate the transfer of OHS
45 information by asserting that their purpose was to act as a “*safety guidance person*” (B3) and
46 “*information conduit*” (B4), an understanding shared by managers and co-workers. Both
47 recalled examples of how they worked at an operational level by helping plant operators
48 conduct hazard assessments and providing legal advice to newly appointed representatives. It
49 appeared, however, that their dominant prevention strategy was to assert their specialist craft-
50 based expertise at OHS committee meetings to influence the development of standards and
51 procedures for the management of specific hazards. This suggests their activities are mainly
52 strategic-technical (Brun and Loiselle, 2002). These representatives were typecast in this way
53 because both emphasised that their priority and “*passion*” (B4) was attending risk reduction
54 committees, driven by a genuine interest in contributing as subject experts. For example,
55 representative B3 participated in multiple committees that focused on subjects that fell within
56 his expertise (railway, crane and fire safety) to contribute to discussions about hazard
57 management: “*Some of the things they wanted to discuss at the meetings involved my*
58 *specialities, so I could give them an answer right there and then.*”
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Craft experts' OHS impacts were difficult to evaluate because neither the representatives, nor their managers and co-workers, provided insight into how they affected OHS outcomes. Analysis of the craft experts' interviews suggests they contributed by influencing the development of standards and procedures for the management of specific hazards at a strategic level, thereby integrating OHS considerations into the technical system. OHS impacts of these actions are largely indeterminate and invisible. They are likely to promote the efficiency of the OHS management system (rung 3), but could also enhance the quality of decisions made by managers at a strategic level thereby indirectly improving working conditions (rung 4).

Discussion

The results illustrated how eight HS representatives and other organisational actors interpreted the HS representative purpose, how the representatives enacted their roles and impacted on OHS at two New Zealand metal manufacturers commitment to employee participation. Mirroring international trends, we found that laws supporting representative employee participation stimulated the establishment of representative participatory structures at both businesses (Glendon and Booth, 1982; Leopold and Beaumont, 1982; Lewchuk *et al.*, 1996) and provided guidance on the rights and functions of HS representatives (Walters, 2005; Walters and Nichols, 2006). Otherwise, Businesses A and B provided diverse settings to investigate the HS representative role by virtue of the size and unionisation of their workforces as well as the formalisation and comprehensiveness of their OHS management systems.

All eight HS representatives were generally found to contribute to the improvement of OHS, which is consistent with international findings (Hall *et al.*, 2006; Shaw and Turner, 2003; Walters *et al.*, 2001; Walters and Nichols, 2006). Similarly to Hall *et al.* (2006), our study also demonstrated that the nature of HS representatives' OHS contributions vary considerably. A four-point typology was created to exemplify the differences between the HS representatives' role enactments and OHS impacts in the same way others have used typologies to capture characteristics of HS representative roles (Hall *et al.*, 2006; Wright and Spaven, 1999). While Wright and Spaven (1999) give primacy to HS representatives' motives/purpose and Hall *et al.* (2002) focus on OHS impact, our typology provides a more holistic perspective of the role by considering the HS representative's purpose, role enactment and OHS impact. Our HS representative sample size was relatively modest compared to these studies, but this limitation provided the opportunity to gather cross-perceptual data that provided a more enriched understanding of how individuals enact the role. Additionally, this typology identifies and accommodates more 'ordinary' approaches to HS representative role alongside the extraordinary, which Hall *et al.* (2006) gave primacy. Research into different contexts is likely to reveal other 'types' of HS representation.

Within the bounds of this study, we found four semi-distinct HS representative role types, labelled to reflect their dominant prevention strategies: administrators, workshop inspectors, problem solvers and craft experts. Table 5 outlines key characteristics associated with each HS representative type in relation to purpose, dominant activity profiles according to Brun and Loisele's (2002) OHS practitioner framework and key OHS impacts in relation to the impact ladder (Danish National Work Environment Authority, 2002).

Table 5. Key characteristics associated with each HS representative 'type'

HS representative	Purpose	Activity profile according to Brun and	Key OHS impact in relation to 'impact
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'types'		Loiselle (2002)	ladder'
Administrator (A1 & A2)	To prevent accidents by focusing on the implementation and operation of OHS management systems.	Organisational-operational	Rung 3: Improvement of OHS management system.
Workshop inspector (A3 & A4)	To improve OHS by informing workers of their OHS obligations and monitoring compliance.	Human-operational	Rung 2: Improvement of workers' attitudes toward OHS.
Problem solver (B1 & B2)	To improve working conditions by finding practical solutions to control hazards.	Technical-operational	Rung 4: Improvement of production processes from an OHS perspective.
Craft expert (B3 & B4)	To act as information conduits at OHS committee meetings.	Technical-strategic	Rung 3: Strategically influence the development of OHS procedures and standards.

HS representative 'types' in relation to the literature

Despite the apparent differences in HS representative role enactment, we found that most types (administrators, workshop inspectors and problem solvers) enacted their roles within the operational dimension, reflecting previous research findings (Brun and Loiselle, 2002; Gaines and Biggins, 1992; Hillage *et al.*, 2000; Johnson and Hickey, 2008). Brun and Loiselle (2002) suggest it is typical for representatives to focus on operational matters because their location on the shop floor allows them to detect threats to workers' health and safety, and that ultimately, "the urgency of dealing with dangers ... takes precedence over activities involving strategy" (p. 533). However, different HS representative types concentrated their efforts on differing dimensions at the operational level. Business A's administrators and workshop inspectors straddled the organisational and human dimensions while Business B's problem solvers and craft experts had a primarily technical focus.

Craft experts' and problem solvers' technical focus is akin to the form of participation envisaged. Under OHSM, worker participation is sought based on the assumption that their technical knowledge and experience of production improves hazard management (Walters and Frick, 2000). New Zealand's HSE Amendment Act also claims that employee participation is necessary so that all those with relevant knowledge can contribute to improving OHS (s. 19A). Craft experts and problem solvers contributed to the technical control of hazards, but at different levels: problem solvers are operational and craft experts are strategic.

Broadly, the label 'problem solver' describes a representative who focuses on improving OHS by finding practical technical solutions to manage hazards. Placement of this HS representative type in the operational-technical category means that they fit the most common activity profile of the HS representative (Brun and Loiselle, 2002). Brun and Loiselle (2002) suggest that representatives who work closely to sources of risk, have greater insight into hazards and can react with practical solutions. Yet, cross-perceptual interviews revealed that problem solvers did not necessarily assert their personal knowledge to control hazards, but

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3 acted as facilitators by combining the expertise of workers and managers to identify and
4 implement solutions.
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7 In contrast, craft experts predominantly used their own technical knowledge of work
8 processes to influence strategic OHS decisions. It is uncommon to find scholarly references
9 to representatives acting in such a strategic and proactive manner.
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11 Interestingly, while craft experts' form of role enactment could conceivably be more
12 advanced than problem solvers' the latter appear to have greater OHS impact. Paradoxically,
13 while craft experts help prevent the introduction of exposures, their impacts appear modest
14 and 'fuzzy' in contrast to the problem solvers who primarily react to workers' concerns about
15 existing hazards. A more in-depth study of representatives' participation at strategic level
16 OHS committees would provide greater insight into their impact. While it is difficult to
17 demonstrate the effects of preventative activities, it is comparatively easy to decipher the
18 impact when representatives identify an issue and facilitate tangible improvements.
19 Ultimately, problem solvers' capacity to reduce physical risk means that they impact on
20 higher rungs of the impact ladder. Further, problem solver B1's OHS impact was estimated to
21 be greater than that of his problem solver counterpart and, indeed, all other representatives.
22 His impact, combined with the nature of his political strategy, suggests he is analogous to
23 Hall *et al.*'s (2006) 'knowledge activist' type. This finding supports Hall *et al.*'s (2006)
24 theory that HS representatives who tactically use knowledge to convince management of the
25 necessity and cost-effectiveness of hazard management have the greatest OHS impact.
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30 While the technical focus of Business B's problem solvers and craft experts aligns with
31 traditional conceptions of what it is to be a HS representative, Business A's administrators
32 and workshop inspectors acted more like managers than workers' representatives.
33 Administrators acted primarily as agents of management by implementing and operating
34 OHS management systems at the organisational level. Indeed, Brun and Loisel (2002)
35 found it was rare for workers' representatives, but more typical for employers' OHS
36 practitioners, to operate within the organisational dimension. Yet, our administrators
37 resemble Wright and Spaven's (1999) 'proactivist' HS representative category, but their label
38 was rejected because it suggested, inappropriately, that representatives acted proactively.
39 Similarly, administrators and proactivists operate in an environment where, without the
40 influence of unions, management unilaterally defined the HS representative role based on a
41 safety management systems model. This type of representation is predicted to become a
42 dominant form of worker participation under OHSM within the context of union decline
43 (Wright and Spaven, 1999).
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48 Workshop inspectors, however, are apparent in other studies, but their activities have not
49 been so labelled. Australian surveys of representatives across multiple industries found that
50 representatives mainly undertook compliance and monitoring functions (Biggins and Phillips,
51 1991; Biggins *et al.*, 1988; Gaines and Biggins, 1992). We found that representatives who
52 enacted their role in this way improved workers' attitudes by increasing safety consciousness
53 and willingness to comply with safety policy. Workshop inspectors were least effective at
54 facilitating OHS improvements as demonstrated by low level impacts on the impact ladder.
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57 Not so far reported are impacts that might run counter to the intended positive OHS impacts
58 of representatives. The apparent negative impact of a workshop inspector was illuminated via
59 co-worker perspectives. Co-workers attributed this to the representative's low educational
60 qualifications.

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5 Specific OHS impacts relative to each representative type, are supplemented by noteworthy,
6 general, impacts. Regardless of whether HS representatives operated under managerial or
7 worker defined employee participation systems, workers perceived that representatives
8 provided a channel to raise OHS concerns and to promote workers' interests. This suggests
9 that the introduction of employee participation systems under the HSE Amendment Act,
10 increases employee participation and 'voice' within organisations. In the case of Business
11 A's non-unionised workforce, HS representatives gave workers a new and legitimate avenue
12 to raise and redress OHS concerns. This finding may go some way to appease researchers
13 with concerns about the 'representativeness' of managerial defined HS representative systems
14 (Wright and Spaven, 1999).
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17 *Factors influencing HS representative role enactment and impact*

18 Overall, the HS representative role was found to be complex and multifaceted, and a number
19 of organisational and individual factors influenced HS representative role enactment and
20 OHS impact. The HS representative role was shaped by how their purpose was interpreted
21 and communicated within organisations. While partly driven by the need to comply with
22 OHS legislation, businesses had different motivations for implementing employee
23 participation and exhibited different interpretations of representatives' role: Business A was
24 more strongly driven by management interests and Business B by worker interests.
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28 At Business A, the employee participation system was designed and dictated 'top down' by
29 management to facilitate compliance with the HSE Amendment Act and to gain financial
30 benefit under the WSMP. Unsurprising, representatives interpreted their roles in line with
31 managerial, rather than workers' interests, and performed functions that managers would
32 ordinarily be expected to undertake. Similarly, Wright and Spaven (1999) found that
33 representatives were likely to act more like managers where management defined HS
34 representatives' roles and communicated their expectations.
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38 In contrast, while Business B's participation agreement was negotiated between workers and
39 managers, and thus complies with the HSE Amendment Act, the defined purpose and
40 functions of the HS representative were not effectively communicated. Without formal
41 guidance, the role was determined locally at the 'grassroots'. Interviewees expected
42 representatives to contribute to hazard management, rather than take responsibility for OHS,
43 and to service worker rather than managerial interests. It is likely that interviewees'
44 interpretations of purpose were influenced by the implicit traditions of how one should act as
45 a worker representative (Frick and Sjostrom, n.d.), shaped by a long history of representation
46 that emerged under union auspices.
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50 In addition to organisational factors, we found that role enactment was influenced by
51 individual factors. HS representatives' job roles appeared to determine the types of activities
52 in which it was acceptable for them to participate as well as their access to resources. For
53 instance, administrator's colleagues inferred it was only 'natural' for them to undertake OHS
54 administration because they administered paperwork as part of their everyday jobs, and had
55 access to computers and telephones to retrieve OHS information and enter data into the
56 OHSM system.
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60 HS representatives' general and OHS expertise, by virtue of their formal qualifications,
knowledge, job skills and experience, were also found to be important individual factors
influencing role enactment (Dawson *et al.*, 1984; Leopold and Beaumont, 1982). Craft

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3 experts, for example, derived their influence from their specialist technical knowledge that
4 management were dependent upon to control risks associated with particular hazards.
5 Similarly, problem solver B1's qualifications and skills as a fire fighter and nurse enabled
6 him to not only help manage hazards, but also to educate workers about health effects
7 associated with chemical exposure.
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10 **Implications**

11 Implications arise for OHS policy, HS representative training courses and
12 organisational/managerial support.
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15 In terms of OHS policy, our findings indicate that the legal status of HS representatives must
16 be protected to ensure their positive workplace impact persists. From a regulatory
17 perspective, consideration needs to be given as to how non-unionised workers participate in
18 the definition of employee participation systems so that representatives primarily fulfil
19 worker, rather than managerial, aspirations in order to reflect the intent of the legislation. We
20 also note that the WSMP economic incentive scheme can play an important auxiliary role in
21 motivating businesses to implement legal requirements for employee participation in OHS.
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25 HS representative training should encourage representatives to build on their individual
26 power bases, particularly their skills and expertise, to influence health and safety outcomes.
27 Representatives' attention should also be drawn to how their job roles could affect their
28 power base by mediating access to entitlements and resources. Further, educating HS
29 representatives about preventative measures could help to increase the OHS impacts of those
30 who focus their efforts on modifying workers' behaviours (workshop inspectors) rather than
31 advocating for more effective high level controls, such as changes to the production process.
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34 Identification of different HS representative 'types' suggests that managers need to consider
35 the position and abilities of the representatives, and locally tailor support packages to meet
36 the needs of individuals. The role typology potentially supports the design of diagnostic tools
37 to ascertain resource and professional development needs of representatives.
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40 **Conclusion**

41 The HS representative role, as defined in New Zealand's HSE Amendment Act, is enacted in
42 different ways as reflected in the identification of four semi-distinct HS representative types:
43 administrators, workshop inspectors, problem solvers and craft experts. Representatives
44 under each 'type' had similar conceptions of purpose, focused on core tasks within the same
45 category of Brun and Loiselle's (2002) OHS practitioner role framework, and had the same
46 key OHS impacts according to the Danish National Working Environment Authority's (2002)
47 impact ladder.
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51 The role typology that formed the basis of this study is distinctive for a number of reasons.
52 First, it provides a more holistic perspective of HS representative role enactment by
53 considering representatives' purpose, role enactment and OHS impact rather than giving
54 primacy to only one of these variables. Second, the typology is constructed on the basis of
55 cross-perceptual data from HS representatives, managers and co-workers, an approach that
56 provided more comprehensive and balanced insight into role enactment.
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59 Further, investigation of the HS representative role in a contextually sensitive manner drew
60 out factors that shaped the roles that HS representatives' assumed. Organisational
characteristics, management and worker aspirations, and the knowledge, skills and

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circumstances of individual representatives all seemed to influence the HS representative role. OHS legislation was also found to be an important catalyst for stimulating the introduction of arrangements for representative employee participation within workplaces, and provided a useful framework to develop the HS representative role to suit the organisational context.

Implications arise from the role typology for OHS policy, management support mechanisms, HS representative training to improve OHS impacts and thus optimise workplace health and safety. The role typology potentially supports the design of diagnostic tools to ascertain resource and professional development needs of representatives.

Overall, the role typology not only describes a range of role enactments, but demonstrates that HS representatives play a vital role in facilitating health and safety improvements in New Zealand workplaces. HS representatives are, indeed, an important element in the OHSM strategy for improving workplace health and safety as well as worker participation.

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