LITERATURE REVIEW ON WORKERS REPRESENTATIVE PARTICIPATION IN **PSYCHOSOCIAL RISK PREVENTION**

Laia Ollé-Espluga María Menéndez Fuster Clara Llorens Serrano Salvador Moncada i Lluís Joan Benach Rovira

Barcelona, June 2014

With the support of the European Commission's Employment, Social Affairs and Inclusion DG

[Disclaimer: The views expressed in this report are those of the authors and do not necessarily reflect the views of European Commission.]









Contents

1. Introducing worker representative participation in occupational health	4
2. Methods	6
3. Determining factors of active and effective participation in psychosocial risk prevention	8
Management	8
Safety representatives	15
Workers	19
4. Impact of worker representatives' activities on the reduction of psychosocial	
exposures and on workplace preventive activities	23
Impact of work organisation interventions on psychosocial exposures	23
Impact on workplace preventive activities	
5. Discussion and conclusions	33
6. References	37

Preface

The present report deals with representative participation in psychosocial risks in Europe. Worker representative participation has proved to be an effective means for ensuring workers' voice and interests in occupational health. However, much about the processes and factors (or barriers and drivers) influencing worker representatives' effectiveness is not yet known, especially when it comes to the field of psychosocial risk prevention (David Walters, Wadsworth, Marsh, Davies, & Lloyd-Williams, 2012, p. 28).

With the ultimate aim to provide insights for the identification of key elements to improve the effectiveness of safety representatives in the area of psychosocial risk prevention, in this report we present two types of literature review results. On the one hand, findings regarding drivers and barriers determining worker representatives' action; and on the other, findings referred to the impact of worker representatives' participation in health and safety at work. In both cases, results focus mainly on psychosocial risks prevention but they are also located within a broad context of occupational health and safety at the workplaces.

1. INTRODUCING WORKER REPRESENTATIVE PARTICIPATION IN OCCUPATIONAL HEALTH

Enshrined in EU treaties, European social dialogue constitutes a fundamental element of the European social model. This social dialogue brings together around the table representatives from trade unions and employers organisations, creating a structure for the discussions, negotiations and joint actions undertaken by European social partners.

In the area of occupational health and safety, the relevance of worker participation is also well understood. The principle of worker participation is seen as an indispensable instrument for a prevention strategy able to couple workers' safety and corporate quality and management. Worker participation is recognised by law at the European and national levels, and public institutions promote it through campaigns¹.

A growing evidence supports that worker representative participation in occupational health has a positive effect on different aspects of workers' health (Coutrot, 2009; Mygind, Borg, Flyvholm, Sell, & Jepsen, 2005; Reilly, Paci, & Holl, 1995; Robinson & Smallman, 2013). Actions taken by safety representatives, directly (through their specific activities) or indirectly (via the improvement of the overall social work environment) lead to effective interventions to improve occupational health and safety (Jacobsen, Kempa, & Vogel, 2006; Milgate, Innes, & O'Loughlin, 2002; Shannon, Mayr, & Haines, 1997).

In Europe, one main approach to promote workers participation in health and safety at work takes place through the election of health and safety representatives. These are workers –most of them experienced workers who are trade union members²- with the

¹ At the European level, see for instance the campaign http://www.healthy-workplaces.eu/es/worker-participation, promoted by the European Agency for Safety and Health at Work

² Yet, the different industrial relations systems make it possible in some countries the election of non-unionised workers as safety representatives

specific mandate to represent workers' interests in occupational health and safety issues. These representatives can be elected by four possible procedures: workers representatives directly selected by workers, workers representatives appointed by workers' representation bodies (i.e., work council or similar), safety representatives who are shop stewards (i.e., elected by unions), and work councils which have safety representative functions (Carley, Baradel, & Welz, 2005; Stanzani & Bridgford, 2002; David Walters et al., 2012). Either by law or collective agreement, health and safety representatives' mandate confers them some specific competences and rights.

In addition to the election of safety representatives, workers' health and safety representation also takes place with the establishment of health and safety committees. Those committees are composed of workers' and employers' representatives who are committed to the improvement of health and safety workplace conditions. Committees identify potential health and safety problems and bring them to the employer's attention. Two special cases are Germany and the Netherlands where work councils assume the health and safety functions. A new form of representation which expands worker representation rights in small firms and supply change structure is represented by the regional health and safety representatives either in countries as Sweden and Norway, or in some sectors or branches like in the case of Italy, or some territories as is the case in Spain (Frick & Walters, 1998; David Walters, 1998, 2004).

In the present report, which addresses for the first time the identification of drivers and barriers faced by these workers' representatives when promoting psychosocial risk prevention at work, we will use the terms "worker representative participation in occupational health" or "occupational health and safety representatives", regardless of the systems of worker representation in which they perform their activities.

2. METHODS

To complete the aim of this project we conducted an extensive scoping review. This scoping review dealt with the identification of experiences and evidence on two main issues: barriers and drivers to active and effective worker representative participation at company level, and the impact of workplace representative participation in promoting health and safety at work. We summarized literature findings referred to psychosocial risk prevention, as well as to occupational health and safety.

Regarding the psychosocial risk prevention field, a scholarly literature review was conducted in PubMed and Social Science Citation Index databases and a grey literature review. Grey literature review researched reports, working papers or other documents of public and international organisations (Eurofound, EU-OSHA, World Health Organization, International Labor Organization, International Commission on Occupational Health), and from E-IMPRO partners. The reviews covered the period 2003-2013, and limits to English and Spanish languages were applied. Search terms included "work organisation", "psychosocial risks", "job organisation", "stress management", "stress prevention", "stress intervention" which were crossed using the term AND, with the terms "health and safety representatives", "health and safety committee", "worker representation", "worker representatives" or "employee representatives", also used in a disjunctive manner. We also read articles or grey documents related to the literature from reference lists of relevant texts. Searches yielded a total of 493 texts, which included 452 scholarly articles and 41 grey literature documents. After reviewing the titles and abstracts from the search results and applying the selection criteria, we finally selected 90 documents for initial review to which we added 16 snow-ball references.

The second literature review expanded the literature review of the European Project on Safety Reps (EPSARE) (Menéndez, Benach, & Vogel, 2009) until 2013. Searches were

made of multiple databases (PubMed, ABI/INFORM, PsycINFO, CSA Sociological Abstracts, and JSTOR), snowball strategy (reviewing references of references) as well as documents from grey literature. The terms "consultation", "participation", and "representation" were used in a disjunctive manner (OR), and crossed using the term AND with the terms "safety representative", "safety committee", "worker representation" or "labour union", also used in a disjunctive manner. Searches were restricted to documents written in English, French or Spanish. The review undertaken by the EPSARE Project included a total of 202 documents. The supplementary review identified 893 references for the period 2008-2013, of which 18 were read after review of title and abstracts and application of selection criteria.

3. DETERMINING FACTORS OF ACTIVE AND EFFECTIVE PARTICIPATION IN PSYCHOSOCIAL RISK PREVENTION

Occupational health and safety representatives can play a key role in promoting and ensuring health and safety at work. For this to happen, their existence is necessary but not sufficient: they need to have an active role and to overcome hindering factors limiting their effectiveness. Many of the factors determining the extent to which representative participation is effective in occupational health remain largely unknown, especially in the field of psychosocial risk prevention.

In this review, the manifold reviewed conditions and factors influencing occupational health and safety representatives' action on occupational health are described. Attention has been placed on conditions and factors at company level, and they are presented according to the main actor we deem they are more closely related to (management, occupational health and safety representatives or workers). However, as factors and barriers need to be framed within different contexts in order to clarify whether or not worker representative participation in occupational health is effective, additional explanations regarding key interlinked macro social and political conditions will be also discussed when regarded convenient to obtain a more accurate picture of the "social dynamics of health and safety at the workplace" (Menéndez et al., 2009, p. 5).

MANAGEMENT

It has been signalled that, within action in occupational health and safety, psychosocial risk prevention is an area where little action is being carried out, and when it is addressed it is preferred to provide information or training rather than initiating procedures for dealing with psychosocial risks (Stolk, Staetsky, Hassan, & Woo Kim,

2012a, 2012b). The most frequent obstacles for not dealing with psychosocial risks reported by management are factors related to cognitive or material deficiencies such as lack of technical support, lack of guidance and lack of resources (Mellor et al., 2011; Milczarek, Irastorza, & European Agency for Safety and Health at Work, 2012; David Walters, Wadsworth, & Quinlan, 2013). In the appraisal of the Management approach undertaken by Mellor et al (2011), shortages were related to lack of resources for survey administration or lack of staff availability to attend trainings, focus groups or meetings of the stress steering group. Other identified barriers include sensitivity towards psychosocial (in the case of firms having in place procedures for managing psychosocial risks) (Milczarek et al., 2012; David Walters et al., 2013). According to Walters' et al analyses on the ESENER survey (2012), lack of resources, as well as lack of awareness, is reported more frequently in firms with lower levels of management commitment.

Commitment from senior and middle management are some of the most well-discussed factors facilitating the initiation and implementation of psychosocial interventions (M. Egan, Bambra, Petticrew, & Whitehead, 2009; Mellor et al., 2011; Milczarek et al., 2012; Moncada, Llorens, Moreno, Rodrigo, & Landsbergis, 2011; Nielsen & Abildgaard, 2013; Nielsen, Randall, Holten, & González, 2010; Nielsen & Randall, 2013; David Walters, 2011).

Senior management support matters because they have the last word on decision-making, even more when it comes to relevant or structural changes. From this perspective, it is important to identify who has the decision power since different thresholds of participation can impact on the results of intervention (Nielsen & Abildgaard, 2013; Nielsen & Randall, 2013). As far as the middle management is concerned, their commitment to psychosocial interventions is preferred since they have a direct responsibility over the implementation of the intervention action plan and for communicating changes (Nielsen & Randall, 2013).

In secondary analyses of the ESENER survey data concern for psychosocial risks and implementation of good occupational health and safety management³ emerged as drivers in relation to the management of psychosocial risks (Milczarek et al., 2012; Stolk et al., 2012b). Also, commitment from the various actors in an organisation either present or absent- is the most cited determining factor in specific work organisation interventions with occupational health and safety representatives (R Bourbonnais, Brisson, Vinet, Vézina, Abdous, et al., 2006; Dahl-Jørgensen & Saksvik, 2005; Lavoie-Tremblay et al., 2005; Mikkelsen & Gundersen, 2003).

When it comes to participation of occupational health and safety representatives in occupational health prevention, management commitment to participatory approaches and to health and safety at work is also a necessary condition to ensure the effective functioning of health and occupational health and safety representatives in the workplace (Milgate et al., 2002; David Walters & Nichols, 2007; Yassi et al., 2013).

Nevertheless, one can observe a notable lack of questioning on what makes management support health and safety at work, including psychosocial risk prevention. Management commitment should be seen as a "multifaceted" issue that may depend on a wide range of factors.

While some authors talk about the "mental model" of the actors involved in an intervention or the institutional culture within the firms (Leka, Griffiths, & Cox, 2004; Nielsen & Randall, 2013), other authors pose the question of the underlying motivation of the interventions (Bambra, Egan, Thomas, Petticrew, & Whitehead, 2007; Shannon & Cole, 2004). Examples can be found where work organisation interventions have been implemented with productivity aims and/or the goal to diminish absenteeism (European Agency for Safety and Health at Work, 2013, p. 21; Moncada & Llorens, 2007, pp. 156–159). In the ESENER secondary analysis –despite being a scarcely

E-IMPRO Project 10

3

³ In Milczarek et al.'s analyses, having formal worker representation at the workplace was one characterising element of a high committed policy in occupational health and safety.

mentioned factor- when managers pointed out absenteeism as a motivation triggering psychosocial risks management this factor turned out to be a strong driver for having procedures and implementing measures (Milczarek et al., 2012). Regarding France, it has been signalled that mediatisation of work-related suicides along with research and new legal developments seemed to have been of crucial relevance in increasing the awareness of psychosocial risk factors at work (Chassaing, Daniellou, Davezies, & Duraffourg, 2011, p. 51; David Walters et al., 2013, p. 48). For instance, in 2009 governmental pressure was put on France Télécom Orange, which developed a series of psychosocial measures but without developing any strategic reorientation (Henry, 2012, p. 11; Politi, 2011). ⁴

Regarding the regulatory framework as a factor triggering management commitment, the existence of legal obligations have been seen as a driver for implementing procedures to manage psychosocial risks at work in the firms participating in the ESENER survey (Milczarek et al., 2012; David Walters et al., 2013). Yet, there might be differences in the contents of legislation and how it can be enforced. For instance, in the analysis of barriers and facilitating factors of the British Management Approach, Mellor et al (2011, p. 1041) emphasized the barrier of a regulatory framework in psychosocial risks limited to risk assessment and lessening of their possible effect while the regulatory framework has turned out to be an opportunity to prompt work organisation interventions in Spain (Moncada et al., 2011). Other facilitating factors observed are the existence of some methods of psychosocial risk evaluation accepted and promoted by the occupational health authorities (Moncada et al., 2011; Moncada & Llorens, 2007, pp. 83–84), the establishment of an external advisor in France (INRS, 2009), or, in some cases, the role played by the Labour Inspectorate (Moncada & Llorens, 2007, pp. 96–97; 103–104; 139–140; David Walters et al., 2013).

insecurity (http://ods-entreprises.fr/nouvelle-et-grave-alerte-suicidaire-a-orange/).

E-IMPRO Project 11

-

⁴ In fact, a new wave of suicides of former France Télécom workers in 2014 would seem to reveal limitations in the implementation of measures of psychosocial prevention at source. According to the "L'observatoire du stress" these suicides could be related to some work organisation factors such as heavy workload together with workforce reduction, or professional and geographical mobility leading to

On a more general scale, regulatory framework in the European Union also facilitates participatory psychosocial interventions (David Walters et al., 2013). On the one hand, the European Framework Directive on Safety and Health at Work (Directive 89/391 EEC) establishes general obligations for the employer in order to ensure health and safety in every aspect related to work. On the other, it lays down the need to enforce participative approaches in occupational health (David Walters, 2011). In the last two decades, the majority of European countries have recognized and regulated the worker's right of participation in occupational health through the EU Framework Directive 1989/391 and its transposition to national legislations. However, in most countries, the level of transposition of this Directive has been inadequate and the legislation of many member countries lack detailed regulatory articulation of key issues such as: the level of responsibility of employers on occupational health; the coverage and election of occupational health and safety representatives; the compulsory need to assess workplace occupational hazards; the need to implement occupational health services; the compulsory need to register occupational hazards on all firms and the development of information, consultation, training; and participation among workers (Vogel, 2004).

Determined or non-existent commitment from management also depends on the context of labour relations at national and firm levels, although this is not a very commonly mentioned factor in terms of influence on the development of psychosocial risk prevention. Dahl-Jørgensen and Saksvik (2005) indicated that work organisation interventions are more frequent in Scandinavian countries due to their stronger tradition of more pro-participative model of social dialogue, as secondary analyses of the ESENER survey corroborated (David Walters et al., 2013). Conversely, ESENER results showed that in Southern countries fewer measures regarding psychosocial risk prevention were implemented (Stolk et al., 2012b; David Walters et al., 2013), what in Spain has been related to the prevailing authoritarian tradition of labour relations (Moncada et al., 2011).

The influence of labour relations at national or company level has been seen to influence the development of occupational health and safety representatives' functions (Markey & Patmore, 2011; Moncada et al., 2011). For instance, in Spain, labour relations can shape a vertical functioning, unfavourable types of work organisation and labour management practices as well as hamper the mere existence of participatory approaches at the workplace. In fact, along with Scandinavian, Continental, Anglo-Saxon and Eastern regimes, "Mediterranean" (or South European) countries constitute a type of labour relations regimes in Europe. One of its main characterising features is that conflict between labour and capital tends to prevail over cooperative relations (Beneyto, 2011; Hyman, 2001).

Labour management practices at company level may also be pointed out. Labour management practices constitute the set of strategic actions conducted by management in order to employ, promote, reward, use, develop and keep or dismiss workers (Rubery, 2007). Labour management practices have a double impact on psychosocial risks and worker representative participation. On the one hand, they have been proved to predict exposures to psychosocial risks through practices referred to work process design, contractual relationship, working time, pay practices and management leadership style (Llorens et al., 2010). On the other hand, labour management practices indirectly undermine worker representatives' power (for a more detailed explanation on the second impact, see section "Safety representatives").

Organisational restructuring caused by economic crisis or by managerial strategies aimed at flexibilising labour force constitute a key barrier (Bambra et al., 2007). As a result, these processes involve a great deal of outcomes hampering the implementation and effectiveness of these interventions such as: managerial restructuring, budget cuts, intensification of work, staff reduction or employee shortage (Albanel, Lusson, & Perusat, 2012, p. 138; R Bourbonnais, Brisson, Vinet, Vézina, Abdous, et al., 2006; Chassaing et al., 2011; Dahl-Jørgensen & Saksvik, 2005;

Gauderer & Knauth, 2004; Lavoie-Tremblay et al., 2005; Mikkelsen & Gundersen, 2003).

Lastly, characteristics of the firms must also be taken into account as determining factors of worker representative participation in work organisation interventions. This is so because several contexts in which firms are inserted such as their size, financial position, economic sector, productive process, competitive strategies, and organisational situation in the labour market (e.g., the fragmentation of previously integrated systems of production and services, outsourcing and subcontracting) have strong implications on occupational health and on worker representation (Menéndez et al., 2009; Pitxer & Sánchez, 2008; David Walters et al., 2012). For instance, it has been seen that the general level of application of the national legislation on occupational health in Europe is still very limited and unequal by countries, by sector of economic activity, category of worker and type of firm (European Agency for Safety and Health at Work, 2010; Vogel, 2001). Regarding the existence of worker representative participation in occupational health at the workplace, this is more common in larger companies, in the public sector, and in industry or tertiary qualified services (Coutrot, 2009; INSHT, 2012; Istituto per il Lavoro, 2006; David Walters et al., 2012). The widespread structural shift in the European economy -with a switch to a service economy and a decrease of industrial weight- has been signalled that to be weakening those (industrial) areas where unions tended to be strong (David Walters, 2011). In a similar way, more preventive action in the psychosocial field has been detected in large firms, in firms that are part of a larger conglomerate, in public services, or in firms with a remarkable presence of women in the workforce (80% or more) (Stolk et al., 2012b; David Walters, Wadsworth, Davies, Lloyd-Williams, & Marsh, 2011; David Walters et al., 2013).

SAFETY REPRESENTATIVES

When reviewing scientific literature on hindering and facilitating factors for the implementation of psychosocial risk intervention, factors related to occupational health and safety representatives are almost non-present.

"(R)equest by employees or their representatives" was identified as a driver for implementing work-related stress procedures and several measures to deal with psychosocial risks in the secondary analysis of the ESENER survey (Milczarek et al., 2012), while an identified barrier is that of occupational health and safety representatives' vision of psychosocial risks (Albanel et al., 2012; David Walters, 2011). According to Walters (2011), a poor understanding of psychosocial risks, marred by false beliefs, can constitute a barrier for occupational health and safety representatives to implement proper work organisation interventions. Two related elements have to be mentioned with regard to this.

First, that prevailing mainstream approaches to occupational health in the field of psychosocial risks also nurture widespread false beliefs such as the complexity of psychosocial risk theory and management, or the association of psychosocial health-related problems with individual characteristics rather than with a damaging work organisation (Albanel et al., 2012; Chassaing et al., 2011; INRS, 2009; Moncada et al., 2011). On a more general scale, this approach to psychosocial risks is accompanied by a conception that occupational health and safety-matters are neutral or merely "technical" concerns (V. Walters & Haines, 1988), neglecting that occupational health and safety matters are heavily affected by political ideology and conflict of interests of key players such as management, government, and unions and workers (Levesque, 1995; Milgate et al., 2002; Sass, 1986; Vogel, 2001).

Secondly, that the role played by unions is of particular relevance. On the one hand, unions' awareness of the importance of psychosocial factors is increasing (David

Walters, 2011), and in some experiences union's support to safety representatives (e.g. through the provision of guidelines, training and tools) has been a driver to foster knowledge on the area of psychosocial risk prevention (Moncada et al., 2011; David Walters et al., 2013). Knowledge, and more specifically what Hall et al (2006) called "knowledge activism", has also been identified as a factor facilitating occupational health and safety representatives' action in occupational health prevention. Knowledge activism deals with the "strategic collection and tactical use of technical, scientific and legal knowledge" (Hall et al., 2006), and it can shape the type of occupational health vision of safety representatives, the skills and preparation they possess, as well as their personal and collective awareness or consciousness (Biggins, Philips, & O'Sullivan, 1991; Hall et al., 2006; Markey & Patmore, 2011). Trained occupational health and safety representatives are more active and effective than untrained ones (García, López-Jacob, Dudzinski, Gadea, & Rodrigo, 2007; Liu et al., 2010; Milgate et al., 2002; David Walters & Nichols, 2006; Yassi et al., 2013). In this regard, several unions' strategies provide crucial support to occupational health and safety representatives and strengthen their position and coverage within firms. Some of these strategies comprise: the promotion of collective action and the empowerment of workers, trade union affiliation in companies, fostering the integration of occupational health and safety representatives' functions into workplace trade union organisations, promotion of trade unions' training, provision of knowledge and information to occupational health and safety representatives, also including the provision of essential logistical support, legal and practical tools so that health and safety representatives can more effectively exercise workers' rights (Jacobsen et al., 2006; Menéndez et al., 2009; Moncada & Llorens, 2007; David Walters, Kirby, Faical, Great Britain, & Health and Safety Executive, 2001). However, there is a degree of delay in the incorporation of psychosocial risk prevention as an important issue for unions. This is because over the years unions have not prioritized the area of health and safety, and even less attention has been conferred to the field of psychosocial factors (Boix & Vogel, 1999; Moncada et al., 2011; David Walters, 2011). Moreover, in some cases a context of lack of cooperation between the existing unions at the workplace can make the implementation of a work organisation intervention difficult

(Chassaing et al., 2011; Moncada & Llorens, 2007). At times, management is fostering this union division.

Another issue is that of occupational health and safety representatives' power. This is relevant because it influences workers' and safety representatives' level of influence and pressure on management, and it is substantially linked to the capacity to mobilise workers (Hall et al., 2006). However, Walters (2011) considers that occupational health and safety representatives' capacity of action and mobilising resources in psychosocial risk prevention face two main barriers. First, occupational health and safety representatives may put insufficient pressure on the management via collective action since psychosocial risks are still scarcely perceived as occupational health problems at workplaces. Also, for occupational health and safety representatives it is more difficult to have an influence on the root causes of most psychosocial risks, which are labour management practices (Albanel et al., 2012; Moncada & Llorens, 2007; David Walters, 2011).

Furthermore, labour management practices indirectly weaken worker representatives' power by limiting the amount of coverage and power exerted by their trade union representatives (Gunningham, 2008; Michael Quinlan & Johnstone, 2009; David Walters et al., 2013). The position of occupational health and safety representatives seems to be particularly powerless and vulnerable within these fragmented and deregulated contextual situations. The context of more flexible employment policies and de-collectivisation of labour relations weaken workers' power at the individual and collective level since high unemployment rates, layoffs and redundancies pose major threatens on workers' employment security (E. C. Cano, 2007; Prieto & Miguélez, 2009; M. G. Quinlan & Mayhew, 2000). Consequently, workers' collective bargaining gets undermined and workers might accept the worsening of employment conditions to keep their jobs, rather than giving priority to health and safety matters (Albanel et al., 2012; E. C. Cano, 2007; Prieto & Miguélez, 2009). Changes in the organisation and management of production also damage occupational health and safety representatives' effectiveness because health and safety risks become more

ambiguous and related to the organisation of work, since it becomes harder for occupational health and safety representatives -and workers- to find out *who decides* what in the work environment; and because workers' greater responsibility for production makes it harder for representatives to find the time to carry out their assignment and to step back and examine the operations from a work environment perspective (Michael Quinlan & Johnstone, 2009; David Walters, 2011).

These constraints make it crucial for occupational health and safety representatives to have enough rights and resources to undertake their duty. For unions and occupational health and safety representatives, the development of legislation on occupational health and specific government-legislated mandatory occupational health and safety representatives and joint health and safety committees are needed as are a clear set of rights (Hovden, Lie, Karlsen, & Alteren, 2008; Menéndez et al., 2009; Yassi et al., 2013). Among other rights, occupational health and safety representatives have the right to inspect the workplace, stop dangerous work or issue provisional improvement notices, they are protected from victimisation or discrimination, and are entitled to have paid time off or access to information to perform their activities (David Walters & Nichols, 2007). However, these right are not often put into practice in many firms due to an obstructive attitude from management (Albanel et al., 2012; García et al., 2007; INRS, 2009; Istituto per il Lavoro, 2006; Ollé-Espluga et al., 2014).

Safety representatives need to have an adequate level of resources such as legal means, time to perform their duty or interact with workers, or access to physical resources (e.g., having an office, computers, webpage, and other necessary materials) to conduct their activities effectively (Albanel et al., 2012; Hovden et al., 2008; Istituto per il Lavoro, 2006; David Walters & Nichols, 2007). The level of occupational health resources and safety representatives shows a large variation across European Union countries, sectors and firms, ranging from those who have their own budget and plenty of resources, to those facing severe restrictions from management and with limited union resources, with many other situations in between (Stanzani & Bridgford, 2002).

Finally, collective bargaining agreements can help to develop a number of favourable conditions for safety representatives such as sections on resources, introduction of employment security; and measures clauses about occupational health and safety representatives' coverage (number of delegates and the workers and locations they cover, membership and constitution of safety committee, creating other forms of representation) (D. Walters, 1996). Regarding specifically occupational health and safety representatives' coverage, its relevance lies on the fact that without a proper coverage, occupational health and safety representatives' influence diminishes and thus they become less effective. Important elements regarding the right of representation are legal prerequisites (for instance, establishing a minimum company size for having worker representatives), and social and political tradition of trade union presence according to firm and economic sector (Coutrot, 2009; Pitxer & Sánchez, 2008; David Walters et al., 2012). Also, the existence of Health and Safety Committees - which in turn are closely related to workplace size - can favour the effectiveness of occupational health and safety representatives by fostering participation and bargaining (Coutrot, 2009; Menéndez et al., 2009; Yassi et al., 2013).

WORKERS

With regard to factors related to workers, two general remarks have to be made: first, that it should be noted that workers do not constitute a homogeneous group, and second, that different sorts of factors are stressed depending on the type of publication.

On the first remark, built on differences according to gender, age, nationality, occupation and employment conditions (e.g.: type of contract, working hours or salary), we can find striking inequalities among groups of workers that have to be considered, as drivers and barriers will behave differently on them (Benach et al.,

2007; World Health Organization, 2012). These inequalities refer to dissimilar exposures to labour management practices (E. Cano & Sánchez, 2011a, 2011b; Llorens et al., 2010), and resulting psychosocial risks (Moncada et al., 2011); and to access, knowledge and communication with worker representatives (Jacod, 2007; Lewchuk, Clarke, & Wolff, 2009; M Quinlan, Mayhew, & Bohle, 2001; David Walters et al., 2013).

As far as differences for the type of publication are concerned, in work organisation interventions published in scientific literature, worker-related factors tend to be more related to individual factors rather than understood within a broader context. Perhaps due to the fact that most of the interventions published in the scientific literature are initiated by research groups that do not belong to the firm but rather to external institutions, there are more mentions to workers' attitude than to labour relations context at company level. Workers' resistance to psychosocial interventions and its associated measures is a factor identified in several articles (Dahl-Jørgensen & Saksvik, 2005; Matt Egan et al., 2007; Mikkelsen & Gundersen, 2003). Dahl-Jørgensen and Saksvik (2005) found a more eager attitude towards active participation from workers that are unfamiliar with projects focusing on their health and working environment, and a more obstructive attitude among civil servants tired of being study subjects for a large amount of studies. This is a factor closely related to what Nielsen and colleagues call the "mental models" of the actors, namely how do the actors involved in an organisational intervention in psychosocial risks -in this case, the workers- understand and react to the intervention (Nielsen & Abildgaard, 2013; Nielsen & Randall, 2013). On the other hand, although workers' lack of awareness of psychosocial risks is remarked in grey literature, it is placed within a broader context but of misinformation and company occupational health strategies which neglect psychosocial risk prevention (Albanel et al., 2012; Chassaing et al., 2011; Moncada & Llorens, 2007).

In some of the scientific articles, workers' involvement is placed in the context of labour relations and labour management practices within the firms. Such is the case with limited scope of worker participation -partly due to top-down decision making (Mikkelsen & Gundersen, 2003)-, or with job restructurings and budgetary reductions

in previous years (Lavoie-Tremblay et al., 2005). As a result, participants' trust can be affected their involvement may be hampered (R Bourbonnais, Brisson, Vinet, Vézina, Abdous, et al., 2006; Lavoie-Tremblay et al., 2005). However, in grey literature aspects referred to the labour relations context and labour management, practices in work organisation interventions published are specified in greater detail. For instance, interventions are framed within contexts of downsizing; reorganisation of work due to the crisis; conflict culture of power and labour relations; productive models based on disadvantageous working and employment conditions (e.g., low salaries, work on public holidays, rotating shift work); or coexistence of multiple types of working and employment arrangements and labour management practices leading to competitiveness among the workforce and workforce division (Albanel et al., 2012; Chassaing et al., 2011; Moncada & Llorens, 2007).

Regarding the review of worker-related factors influencing the effectiveness of occupational health and safety representatives in the improvement of health and safety at work, the existing connections between elements become more apparent. As an example, communication has been identified as a driver both for the success of work organisation interventions and for the activity of occupational health and safety representatives. When it comes to interventions, the amount of information and communication of the intervention parties can influence workers' involvement (Chassaing et al., 2011; Matt Egan et al., 2007; Mellor et al., 2011; Moncada & Llorens, 2007; Nielsen & Abildgaard, 2013; Nielsen & Randall, 2013). As for occupational health and safety representatives, communication facilitates risk identification and can raise awareness of occupational health matters (Ollé-Espluga et al., 2013; David Walters & Nichols, 2007). Workers' awareness of health and safety issues can be seen as a result of the information activities performed by occupational health and safety representatives (Coutrot, 2009; García et al., 2007), but it can also be related to management's occupational health strategies, the nature of their job (with higher or lower risks), or to gender patterns or "self-censorship" in neglecting important risks and harshness associated to one's work (Gollac & Volkoff, 2006).

Another example is that of occupational health and safety representatives' and workers' empowerment. In that respect, the level of power of occupational health and safety representatives' depends moderately on the support provided by workers. This support is in turn partially conditioned on the type of interaction established with workers (Carpentier-Roy, Ouellet, Simard, & Marchand, 1998; Ollé-Espluga et al., 2013). Interaction becomes progressively more difficult when the number of workers with limited, or no access to any form of representation in health at work, increases (Albanel et al., 2012; Chassaing et al., 2011; Coutrot, 2009; Moncada & Llorens, 2007; M Quinlan et al., 2001; Michael Quinlan & Johnstone, 2009; David Walters et al., 2012). Also, a huge hindrance to occupational health and safety representatives' capability of mobilization is workers' fear of retaliation from management, which limits workers' support and has a direct relationship with workers' employment conditions and labour management practices (Gunningham, 2008; Ollé-Espluga et al., 2013).

4. IMPACT OF WORKER REPRESENTATIVES' ACTIVITIES ON THE REDUCTION OF PSYCHOSOCIAL EXPOSURES AND ON WORKPLACE PREVENTIVE ACTIVITIES

This section introduces the results of the literature review concerning the impact of worker representative participation. Results show first work organisation interventions with active participation of worker representatives, and then examples of studies examining the effectiveness of occupational health and safety representatives on preventive action.

IMPACT OF WORK ORGANISATION INTERVENTIONS ON PSYCHOSOCIAL EXPOSURES

Apart from time and language restrictions, interventions presented in this sub-section have been chosen on the basis of two main criteria: involvement of workers' representatives and action taken on work organisation. In presenting the results we have separated them according to their source, either scientific or grey literature.

A main difference between interventions published in the scientific literature and those in the grey literature is that in the scientific literature, interventions tend to be originated and promoted as research studies that count with management support, whereas in the grey literature we can find experiences mostly promoted by the management or emerging from a context of union action at the workplace. Furthermore, scientific literature stands out for providing higher methodological detail and more information regarding health outcomes.

Taking a look at work organisation interventions published in scientific literature (Table 1), these are interventions accounting for experiences developed in Canada and Norway. In these interventions participation is normally channelled through steering committees and often accompanied by various forms of workers' direct participation such as mail boxes, interviews, focus groups, or plenary sessions. Steering committees

are always composed of management representatives (unit/plant managers and, sometimes, human resources personnel) and worker representatives. In some cases, steering committees incorporate other type of participants such as health and safety professionals or researchers from the group promoting the work organisation intervention.

With regard to the impact of these work organisation interventions, it can be observed that measures to reduce exposures to psychosocial risks have been proposed or initiated as a result of these initiatives. Most of them dealt with communication (between co-workers and from management to workers to improve information flow), changes in the way the work is done, and team building (Table 1). Regarding health outcomes, a wide range of health-related aspects has been analysed. Positive results have been found regarding physical outcomes (pain regarding some work-related musculoskeletal disorders); factors affecting mental health (e.g.: effort-reward or psychological demands); or ultimate consequences of psychosocial risks such as burnout and absenteeism (Table 1).

Table 1. Impact of work organisation interventions with active participation of worker representatives on working conditions and health-related outcomes (2003-2013, scientific literature)

Author and	Country	Data and Methods	Impact on working	Impact on health-related
year			conditions	outcomes
(Mikkelsen & Gundersen, 2003)	Norway	Participatory organisational intervention with quasi-experimental evaluation realised in a work unit within a Postal Service sorting terminal (89 participants).	26 improvement activities were proposed. They were centred on (1) communication, (2) management, (3) physical work environment, and (4) well-being	Compared to the control group, positive results were observed regarding decreasing job stress and improved job satisfaction, as well as a favourable and lasting effect on the learning climate dimension Autonomy and Responsibility.
(Dahl- Jørgensen & Saksvik, 2005)	Norway	Pre/post study of two organisational interventions implemented in municipal units and in a shopping mall (282 participants in total).	No data	In one of the units (shopping mall) significant changes were seen regarding depersonalization and subjective health complaints.
(Lavoie- Tremblay et al.,	Canada	Participatory organisational intervention	Work team suggested action plans aimed at (1) work	Improvements in reward and a decrease in effort-reward

2005)		in one unit of a hospital centre (60 participants).	reorganisation, (2) enrichment of roles, (3) improvement in charting notes, (4) information circulation, (5) team consolidation, (6)	imbalance were seen, as well as reduction in social support from superiors and a decrease in absenteeism rate.
			introduction of two team meetings per shift, (7) involvement of families, (8) continuity of health care and (9) improvement of partnerships with the medical team and pharmacy.	
(R Bourbonnais, Brisson, Vinet, Vézina, & Lower, 2006)	Canada	Pre/post participatory intervention undertaken in three care units of an acute care hospital (500 participants).	56 interventions were recommended targeting 6 themes: (1) Team work and team spirit; (2) Staffing processes; (3) Work organisation; (4) Training; (5) Communication; (6) Ergonomy	see below
(R Bourbonnais, Brisson, Vinet, Vézina, Abdous, et al., 2006)	Canada	see Bourbonnais et al. 2006a	see Bourbonnais et al. 2006a	Compared to the control hospital, in the hospital were the intervention took place improvements were observed regarding drop in psychological demands, decrease in effort-reward imbalance and increase in reward (borderline significance), as well as regarding sleeping problems and work related burnout.
(Renée Bourbonnais, Brisson, & Vézina, 2011)	Canada	see Bourbonnais et al. 2006a	The 6 aforementioned themes mentioned in Bourbonnais et al. 2006a, but overlapping with interventions aimed at a 7th theme related to the external context (turnover among management and stressful situations due to new epidemiological phenomena)	The intervention group showed improved outcomes for psychological demands, effort-reward imbalance, quality of work, physical load and emotional demands. Also, work-related and personal burnout decreased.
(Laing et al., 2007)	Canada	Participatory ergonomics programme carried out in an automotive parts manufacturing factory.	The ergonomic intervention aimed mostly at improving communication dynamics between workplace stakeholders and enhancing worker perceptions of self-determination and influence in the workplace.	The intervention unit got better results with regard to ergonomics-related communication dynamics, (increased) perceived influence, and (slightly decreased) pain severity for the back and leg/lower limb.

Turning to psychosocial risk interventions published in grey literature, they account for experiences developed in Continental Europe: Germany and Austria, and in Southern Europe: France and Spain (Table 2). Unlike the reviewed work organisation interventions, experiences published in institutional literature are not promoted by research groups but rather management or worker representatives. Not surprisingly, the extent of participation exerted by worker representatives is more prominent in cases where they pushed for psychosocial risk prevention at work.

In these experiences, participative methodologies also include establishing a steering committee with, sometimes, some forms of workers' direct participation (interviews or work groups such as health or prevention circles). Compared to the experiences published in scientific literature, the observed difference is that no researchers take part in the intervention and that in a few cases -138 and 153, Table 2- the steering committee incorporates stakeholders such as accident and/or health insurances, or the Labour Inspectorate.

Manifold work-related psychosocial aspects have been tackled in these experiences: from double presence or sexual harassment, to insecurity or social support from superiors. The most frequent measures taken by these interventions in order to reduce the exposure to psychosocial risks are the reorganisation of working time and job redesign; introducing changes in the working clothes or equipment; or favouring career advancement at work. Some of these documents provide a thorough description of the whole process of decision-making, showing for instance, how most difficulties arise when trying to reduce workload by suggesting the recruitment of staff.

In general, these interventions are not accompanied by pre-post evaluations, nor they focus attention on the impact on health-related outcomes. Only in two cases, these experiences report improvements after the interventions were undertaken. They related to several forms of improvement of work environment (increased solidarity and good atmosphere), better knowledge of health and safety risks and eradication of sexual harassment.

Table 2. Impact of work organisation interventions with active participation of worker representatives in working conditions and health-related outcomes (2003-2013, grey literature)

Source	Case	Country	Data and Methods	Impact on working conditions	Impact on health-related outcomes
(European Agency for Safety and Health at Work, 2012)	case 121 ⁵	Germany	Participatory occupational safety and health management intervention that ended up tackling disrespect and sexual harassment towards cleaning workers in a hospital.	Within health circles, hospital cleaners -all of them women- claimed against their uniforms, a source of sexual harassment, discomfort, and potential work accidents. As a result of the intervention, new uniforms were proposed and accepted.	Increased self-confidence and solidarity among the cleaning staff, as well as end of sexual harassment.
	case 138	Germany	Participatory intervention aimed at assessing psychosocial risks at work and installing a health management system accordingly in a hospital.	Along with a programme for individual prevention and work environment changes, work organisation improvements were undertaken with regard to the management of patient transfer and the assignment of operating rooms.	No data
	case 151 ⁶	Austria	Intervention aimed at dealing with the physical and psychological stress suffered by cleaners in two company sites of a major facilities management company.	th The project was still in progress but No data ress recommendations targeted aspects such as occupational health and safety training,	

⁵ Further information has been extracted from (Buffet & Priha, 2009)

⁶ Further information has been extracted from (Tregenza & European Agency for Safety and Health at Work, 2009, pp. 170–174)

	case 152	France	Conformation of a reference group involving workers to develop an autonomous permanent preventive approach among chambermaids in a hotel.	A new work organisation was implemented gradually, including: the establishment of an operating procedure for room cleaning and the appointment of expert chambermaids for training new recruits and supervising compliance with the procedures, the purchase of new equipment, or the modification of the breakdown of working hours.	Improvements regarding the work atmosphere, reduction in the number of occupational injuries and raised tea awareness of ergonomic risks were observed one year later.
(Moncada & Llorens, 2007)	Pp 156- 159	Spain	Experience of psychosocial risk prevention in a textile firm with 544 workers.	Adopted measures aimed to reorganise working time in order to tackle double presence; to change personnel policy change in face of the leadership quality, low esteem and hiding emotions problems; to enrich work content; and to change the wage structure.	No data
	Pp 169- 171	Spain	Psychosocial risk prevention intervention in a chemical firm with 571 workers.	Measures have been implemented in order to tackle "double presence". Some examples are the introduction of flexible daily schedule and intensive schedule on Friday and variations in permissions and holidays variations in the way to enjoy personal days, maternity leave or vacation days, as well as compensating irregular working times by way of time off	No data
	Pp 172- 173	Spain	Intervention aimed at dealing with psychosocial risks prevention in a call centre with 113 workers.	After the process some measures have been suggested: (1) to promote full-time employment among part-time workers in order to reduce the workload, (2) to introduce a time span of 20 seconds between calls, and (3) to execute the law regarding breaks regardless of their working and employment conditions.	No data

Pp. 174- 177	Spain	Psychosocial risk prevention experience implemented in a hotel with 438 workers.	Changes aimed at improving working time management and reducing workload were proposed. Implemented measures focused on control over the working time and reducing workload peaks in case of sick leaves.	No data
Pp. 178- 180	Spain	Intervention in the area of psychosocial risk prevention undertaken in a catering firm with 1355 workers.	Three different sets of measures were accepted, although in the end management refused to implement some of them. Accepted measures aimed at improving the equipment and supplies; at changing the type of raw material in order to decrease workers' workload; and at resizing the workforce.	No data
Pp 183- 185	Spain	Intervention implemented in a Non Governmental Organisation with 60 workers.	Implemented measures sought to compensate overtime and work on public holidays and to introduce mechanisms to enhance internal promotion.	No data
Pp. 186- 187; 193- 194	Spain	Psychosocial risk prevention intervention in a wine and "cava" firm with some 280 workers.	Proposals were made (but not all of them implemented) in order to increase support from middle management and improve workers treatment from middle management and superiors. In order to tackle insecurity, safety representatives suggested to regulate and introduce variations in the rotation system in order to rotations do not suppose pay losses. These measures were approved but not implemented.	No data
Pp 188- 189	Spain	Experience undertaken in a metal container manufacturing company with 45 workers.	By means of improving communication between management and workers, implemented measures have tackled two psychosocial factors: insecurity and leadership.	No data

IMPACT ON WORKPLACE PREVENTIVE ACTIVITIES

In this section we summarize studies from different European countries regarding worker representative participation and its impact on workplace activities (Table 3). Data from different sources (case studies, randomized controlled intervention or secondary analyses of surveys) are used to examine occupational health and occupational health and safety representatives' effectiveness. The geographical scope of the reviewed documents mainly encompasses different European Union Member States or the whole of the EU-27 states plus Croatia, Norway, Switzerland and Turkey. Only one study is referred to US data.

One of main results of this literature review is that the existence of occupational health and safety representatives is associated with better compliance with regulatory standards and implementation of occupational health and safety management measures (e.g., having a documented occupational health and safety policy, providing information, or use of personal protective equipments) (Coutrot, 2009; Istituto per il Lavoro, 2006; David Walters & Nichols, 2006; David Walters et al., 2012). Nevertheless, context matters and many examples can be observed in these studies factors such as size, sector, management commitment or type of labour relations framework at a macro level influence occupational health and safety representatives' effectiveness.

With regard to health outcomes, one study shows better results in reducing a work-related illness in a participatory intervention with worker representatives (Mygind et al., 2005); whereas inconsistent results are found regarding rates of occupational injuries (Coutrot, 2009; Liu et al., 2010; Robinson & Smallman, 2013). In Robinson and Smallman's study (2013), lower injury rates were associated with worker representatives acting in firms with deeper voice configurations (i.e. negotiation and consultation versus information or no participation scenarios). In Liu et al.'s study (2010), occupational health and safety representatives' action leads to better results in terms of injury rates when they have received training. Coutrot (2009) does not find

any association between presence of worker representative participation in occupational health and injury rates although he echoes the discussion regarding that the existence of workers' representatives can lead to higher levels of accident reporting, as a form of expression of better compliance with the rules.

Table 3. Studies on occupational health and occupational health and safety representatives' participation in preventive action (2003-2013)

Source	Country	Data and Methods	Impact on occupational health and safety management or on health
(Istituto per il Lavoro, 2006)	Italy	8,138 firms by sector, production, ownership, and size (60% industrial production and 40% services)	Positive association between the presence of safety representatives and an indicator regarding occupational health and safety management. Large differences in safety representatives' presence are found within firms with satisfactory (52%) vs. unsatisfactory (16%) quality indicators.
(Mygind et al., 2005)	Denmark	Randomized controlled intervention (1year). Data on the implementation process through questionnaires focus interviews and materials.	Participatory activities of well- trained shop floor workers, resources and safety representatives are crucial for positive results in skin problems reduction.
(David Walters & Nichols, 2006)	UK	Five Chemical Industry sites applying SRSC Regulations 1977. Interviews, documents, questionnaire (1477 workers)	Joint arrangements and development of consultative structures and processes from management show better occupational health outcomes. Participation of workers and safety representatives are necessary to achieve better health and safety outcomes, and safety awareness.
(Coutrot, 2009)	France	Secondary analyses of three surveys: SUMER 2003; REPONSE 2004; Conditions de Travail 2005	Positive association between the presence of Health and Safety Committees (CHSCT) and preventive measures at the workplace (e.g., personal protective equipment against several types of risk, or more and better information on occupational health and safety). No association was observed between CHSCT existence and lower injury rates or better self-rated health.
(Liu et al., 2010)	USA	Secondary analysis of Pennsylvania unemployment insurance data (1996–2006), workers'	On average, firms that joined the Certified Safety Committee Program - a programme offering 5% discount on workers' compensation insurance

		compensation data (1998–2005), and the safety committee audit data (1999–2007).	premiums for firms having a certified joint labour management safety committee- did not show a reductions in injury rates. However, declines in injury rates were registered in firms following the requirement to train their safety committee members.
(David Walters et al., 2012)	EU-27 Member States plus Croatia, Norway, Switzerlan d and Turkey	Secondary analysis of the ESENER survey 2009 (managers' responses).	Formal management of traditional health and safety risks and psychosocial risks are more likely to happen in workplaces with worker representation, even more so in combination with high management commitment to health and safety.
(Robinson & Smallman, 2013)	UK	Analysis of the British Workplace Employment Relations Survey 2004 matching managers' responses and worker representatives' responses (590 workplaces).	Different levels of participation on occupational health and safety are observed, with a notable prevalence (61%) of high participation. Lower levels of participation are associated with higher levels of injuries and the other way round.

5. DISCUSSION AND CONCLUSIONS

Despite its legal status as a figure of prevention, little has been studied about the role played by workers' representatives in the prevention of psychosocial risks at workplaces. By using a broad range of sources of knowledge (articles, reports, books...) from the scientific and institutional literature, this report seeks to fill some gaps in this matter.

This report has identified **drivers and barriers** to active participation of occupational health and occupational health and safety representatives related to workers, worker representatives, and management. Results show that a key driver is the existence of a **regulatory framework** setting provisions for the prevention of psychosocial risks at the workplace, and allowing the existence of worker representative participation in occupational health and safety.

Management commitment has also emerged as one of the most cited determinants for managing occupational health and safety at the workplace, and for enabling worker representatives' effectiveness. However, differences regarding the direction of management commitment can be observed according to the type of literature source. A higher number of experiences where management is committed were found in the scientific literature than in the grey literature. This can be grounded in the fact that scientific literature might have a publication bias, and thus presenting at a larger extent positive experiences. Conversely, grey literature is providing thorough details of what is behind interventions and how processes lead to action or not.

Additionally, perhaps because interventions published in the scientific literature correspond to external work organisation initiatives normally encouraged and led by research groups. They place more emphasis than the grey literature on workers' attitude, especially when it comes to often reluctance. Grey literature, in turn, locates

labour management practices at the workplace, thus providing examples on the influence of balance of power on the management of health and safety at work. Furthermore, since interventions reported in the grey literature often take place without middle management's approval, aspects such as workers' support, or access and communication from representatives to workers as a way to raise awareness of psychosocial risks are more expressed in these interventions.

In this regard, it deserves mentioning the role of the vision and understanding of psychosocial risks hold by worker representatives. The literature captures the evolution of psychosocial risks perception: starting from premises establishing that psychosocial disorders are due to individual-based problems reaching the point to recognize the influence played by work organisation on them, and therefore becoming a driver for psychosocial risk prevention. Unions' and occupational health and safety stakeholders' contributions have been instrumental in the dissemination of such messages and knowledge (e.g. providing training, elaborating information tools, or, in some countries, establishing authorised psychosocial risk evaluation methods with active worker representative participation and acting on the source of psychosocial exposures).

The review on drivers and barriers has thus provided a multilayered analysis of factors influencing worker representative participation in occupational health. The focus of the review has been on the firm, but also on intertwined factors relating to the policy framework and economic context such as labour relations context at macro and firm level, or the extent to which health and safety protection is provided by national regulation. Further research is needed on two areas: how representative participation is dealing with increasing job insecurity (precariousness) and how participation of occupational health and safety representatives develops, especially in psychosocial risk interventions.

In this report, attention has also been placed on the **impacts** of worker representatives' action. In our review of work organisation interventions, scientific literature presents more detailed findings on health-related outcomes than grey literature, which gives more information about the process leading to taking action in psychosocial risk prevention and the adopted changes in working conditions. In the reviewed interventions, the most frequent reported forms to tackle psychosocial risks include different measures aimed at reducing exposures at source such as redesigning the way work is done; introducing variations in working time; changing or purchasing new working equipments; and improving communication. On the other hand, most difficulties arise when suggestions involve increasing the staff. Nonetheless, it can be observed that in general little details are provided concerning the role played by occupational health and safety representatives in work organisation intervention dealing with psychosocial risk prevention at source.

In our review, work organisation interventions have not been compared with other experiences without worker representation so that a conclusion as to what type of interventions is more effective cannot be reached. However, reviewing the literature on worker representatives' impact on health and safety management and occupational health-related outcomes, evidence shows that wherever worker representation is present, health and safety is better ensured. For instance, results describe that worker representative participation in occupational health is associated to higher levels of health and safety management, better compliance with the rules, or higher degrees of health and safety information and awareness among workers.

Occupational health and safety representatives have developed an important task in guaranteeing safe and healthy workplaces, therefore, at a time when we are gaining understanding of psychosocial risks and focusing prevention aimed at modifying work organisation, it seems necessary to enhance the role of worker representatives in psychosocial risk prevention. This way, the review stresses some policy-related

determinants that could be addressed in order to improve workers' health and safety at work.

6. REFERENCES

Albanel, X., Lusson, J., & Perusat, D. (2012). Les actions de prévention des risques psychosociaux de la SNCF Nord-Pas-de-Calais. Un état des lieux - 2008-2012. Montreuil: Émergences.

Bambra, C., Egan, M., Thomas, S., Petticrew, M., & Whitehead, M. (2007). The psychosocial and health effects of workplace reorganisation. 2. A systemic review of task restructuring interventions. Journal of Epidemiology and Community Health, 61(11), 1028–1037. doi:doi:10.1136/jech.2006.054999

Benach, J., Muntaner, C., Solar, O., Santana, V., Quinlan, M., & Network, E. (2007). Employment, work, and health inequalities: A Global perspective (Vol. http://www.who.int/social_determinants/resources/articles/emconet_who_report.pdf). Geneva: WHO. Retrieved from http://www.who.int/social_determinants/resources/articles/emconet_who_report.pdf

Beneyto, P. J. (2011). Afiliación y representación sindical en Europa. Últimos datos y estudios comparados. Gaceta Sindical: Reflexión Y Debate, (16), 195–223.

Biggins, D. R., Philips, M., & O'Sullivan, P. (1991). Benefits of Worker Participation in Health and Safety. Labour and Industry, 4(1), 138–159.

Boix, P., & Vogel, L. (1999). Risk assessment at the workplace: a guide for union action. Brussels: European Trade Union Technical Bureau For Health And Safety (TUTB).

Bourbonnais, R., Brisson, C., & Vézina, M. (2011). Long-term effects of an intervention on psychosocial work factors among healthcare professionals in a hospital setting. Occupational and Environmental Medicine, 68(7), 479–486. doi:10.1136/oem.2010.055202

Bourbonnais, R., Brisson, C., Vinet, A., Vézina, M., Abdous, B., & Gaudet, M. (2006). Effectiveness of a participative intervention on psychosocial work factors to prevent mental health problems in a hospital setting. Occupational and Environmental Medicine, 63(5), 335–342. doi:10.1136/oem.2004.018077

Bourbonnais, R., Brisson, C., Vinet, A., Vézina, M., & Lower, A. (2006). Development and implementation of a participative intervention to improve the psychosocial work environment and mental health in an acute care hospital. Occupational and Environmental Medicine, 63(5), 326–334. doi:10.1136/oem.2004.018069

Buffet, M.-A., & Priha, E. (2009). Workforce diversity and risk assessment: ensuring everyone is covered. Luxembourg: Office for Official Publications of the European Communities.

Cano, E. C. (2007). La extensión de la precariedad laboral como norma social. Sociedad Y Utopía: Revista de Ciencias Sociales, (29), 117–138.

Cano, E., & Sánchez, A. (2011a). Las prácticas empresariales de gestión de la mano de obra en el segmento joven de la población trabajadora. València: Instituto Sindical de Trabajo, Ambiente y Salud.

Cano, E., & Sánchez, A. (2011b). Las prácticas empresariales de gestión de la mano de obra en los diferentes grupos ocupacionales. València: Instituto Sindical de Trabajo, Ambiente y Salud.

Carley, M., Baradel, A., & Welz, C. (2005). Works councils: Workplace representation and participation structures. Dublin: Office for official publications of the European Communities.

Carpentier-Roy, M.-C., Ouellet, F., Simard, M., & Marchand, A. (1998). L'appui des travailleurs aux Comités paritaires de santé et de securité du travail (CPSST): une analyse psychodinamique. Le Travail Humain, 61(2), 171–185.

Chassaing, K., Daniellou, F., Davezies, P., & Duraffourg, J. (2011). Recherche-Action "Prévenir les risques psychosociaux dans l'industrie automobile: élaboration d'une méthode d'action syndicale'. Montreuil: Émergences.

Coutrot, T. (2009). Le rôle des comités d'hygiène, de sécurité et des conditions de travail en France: Une analyse empirique. Travail et Emploi, (117), 25–38.

Dahl-Jørgensen, C., & Saksvik, P. O. (2005). The impact of two organizational interventions on the health of service sector workers. International Journal of Health Services: Planning, Administration, Evaluation, 35(3), 529–549.

Egan, M., Bambra, C., Petticrew, M., & Whitehead, M. (2009). Reviewing evidence on complex social interventions: appraising implementation in systematic reviews of the health effects of organisational-level workplace interventions. Journal of Epidemiology and Community Health, 63(1), 4–11. doi:10.1136/jech.2007.071233

Egan, M., Bambra, C., Thomas, S., Petticrew, M., Whitehead, M., & Thomson, H. (2007). The psychosocial and health effects of workplace reorganisation. 1. A systematic review of organisational-level interventions that aim to increase employee control. Journal of Epidemiology and Community Health, 61(11), 945–954. doi:10.1136/jech.2006.054965

European Agency for Safety and Health at Work. (2010). European Survey of Enterprises on New and Emerging Risks. Managing safety and health at work. Luxembourg: Publications Office of the European Union.

European Agency for Safety and Health at Work. (2012). Worker participation practices: a review of EU-OSHA case studies. Luxembourg: Office for Official Publications of the European Communities.

European Agency for Safety and Health at Work. (2013). European Good Practice Awards 2012–2013. Awarded and commended examples. Luxembourg: Publications Office.

Frick, K., & Walters, D. (1998). Worker Representation on Health and Safety in Small Enterprises: Lessons from a Swedish Approach. International Labour Review, 137, 367.

García, A., López-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(9), 784.

Gauderer, P. C., & Knauth, P. (2004). Pilot study with individualized duty rotas in public local transport. Le travail humain, 67(1), 87–100. doi:10.3917/th.671.0087

Gollac, M., & Volkoff, S. (2006). La santé au travail et ses masques. Actes de La Recherche En Sciences Sociales, 163(3), 4. doi:10.3917/arss.163.0004

Gunningham, N. (2008). Occupational Health and Safety, Worker Participation and the Mining Industry in a Changing World of Work. Economic and Industrial Democracy, 29(3), 336–361. doi:10.1177/0143831X08092460

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), 408–436.

Henry, O. (2012). Les syndicats et l'expertise en risques psychosociaux. Actes de la recherche en sciences sociales, n° 194(4), 52–61. doi:10.3917/arss.194.0052

Hovden, J., Lie, T., Karlsen, J. E., & Alteren, B. (2008). The safety representative under pressure. A study of occupational health and safety management in the Norwegian oil and gas industry. Safety Science, 46(3), 493–509.

Hyman, R. (2001). Understanding European Trade Unionism: Between Market, Class and Society. London: SAGE.

INRS. (2009). Stress au travail. Les étapes d'une démarche de prévention. Paris: INRS. Retrieved from http://hdl.handle.net/2332/1664

INSHT. (2012). VII Encuesta Nacional De Condiciones De Trabajo. (M. A. Almodóvar Molina, Ed.). Madrid: Ministerio del Trabajo y Asuntos Sociales. Instituto Nacional de Seguridad e Higiene en el Trabajo.

Istituto per il Lavoro. (2006). The Role of the Safety Representative in Italy. Istituto per il Lavoro.

Jacobsen, L., Kempa, V., & Vogel, L. (2006). Finding your way in the European Union health and safety policy: a trade union guide. Brussels: European Trade Union Institute for Research, Education, and Safety, HESA Dept.

Jacod, O. (2007). Les institutions représentatives du personnel: davantage présentes, toujours actives, mais peu sollicitées par les salariés. Dares Analyses - Dares Indicateurs, 05(1).

Laing, A. C., Cole, D. C., Theberge, N., Wells, R. P., Kerr, M. S., & Frazer, M. B. (2007). Effectiveness of a participatory ergonomics intervention in improving communication and psychosocial exposures. Ergonomics, 50(7), 1092–1109. doi:10.1080/00140130701308708

Lavoie-Tremblay, M., Bourbonnais, R., Viens, C., Vézina, M., Durand, P. J., & Rochette, L. (2005). Improving the psychosocial work environment. Journal of Advanced Nursing, 49(6), 655–664. doi:10.1111/j.1365-2648.2004.03339.x

Leka, S., Griffiths, A., & Cox, T. (2004). La organización del trabajo y el estrés. Geneva: World Health Organization. Retrieved from http://apps.who.int/iris/handle/10665/44307

Levesque. (1995). State Intervention in Occupational Health and Safety: Labour-Management Committees Revisited. In A. Giles, A. E. Smith, & Wetzel (Eds.), Proceedings of the XXXIst Conference of the Canadian Industrial Relations Association Toronto (pp. 217–231). Toronto: CIRA.

Lewchuk, W., Clarke, M., & Wolff, A. de. (2009). Representing Workers on Health and Safety in Precarious Employment: Some Canadian Experiences. In D. Walters & T. Nichols (Eds.), Workplace Health and Safety. International Perspectives on Worker Representation (pp. 135–163). Houndmills, Basingstoke, Hampshire: Palgrave Macmillan.

Liu, H., Burns, R. M., Schaefer, A. G., Ruder, T., Nelson, C., Haviland, A. M., ... Mendeloff, J. (2010). The Pennsylvania certified safety committee program: an evaluation of participation and effects on work injury rates. American Journal of Industrial Medicine, 53(8), 780–791. doi:10.1002/ajim.20861

Llorens, C., Alós, R., Cano, E., Font, A., Jódar, P., López, V., ... Moncada, S. (2010). Psychosocial risk exposures and labour management practices. An exploratory approach. Scandinavian Journal of Public Health, 38(3 Suppl), 125–136. doi:10.1177/1403494809354363

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. doi:10.1111/j.1467-8543.2009.00756.x

Mellor, N., Mackay, C., Packham, C., Jones, R., Palferman, D., Webster, S., & Kelly, P. (2011). "Management Standards" and work-related stress in Great Britain: Progress on their implementation. Safety Science, 49(7), 1040–1046. doi:10.1016/j.ssci.2011.01.010

Menéndez, M., Benach, J., & Vogel, L. (2009). The impact of safety representatives on occupational health. A European perspective. Brussels: ETUI.

Mikkelsen, A., & Gundersen, M. (2003). The Effect of a Participatory Organizational Intervention on Work Environment, Job Stress, and Subjective Health Complaints. International Journal of Stress Management, 10(2), 91–110. doi:10.1037/1072-5245.10.2.91

Milczarek, M., Irastorza, X., & European Agency for Safety and Health at Work. (2012). Drivers and barriers for psychosocial risk management an analysis of the findings of the European survey of enterprises on new and emerging risks (ESENER): report. Luxembourg: Publications Office of the European Union. Retrieved from http://bibpurl.oclc.org/web/47835 http://osha.europa.eu/en/publications/reports/drivers-barriers-psychosocial-risk-management-esener

Milgate, N., Innes, E., & O'Loughlin, K. (2002). Examining the effectiveness of health and safety committees and representatives: a review. Work, 19(3), 281–290.

Moncada, S., & Llorens, C. (Eds.). (2007). Organización del trabajo. Factores Psicosociales y Salud. Experiencias de prevención. [Madrid: Instituto Sindical de Trabajo, Ambiente y Salud.

Moncada, S., Llorens, C., Moreno, N., Rodrigo, F., & Landsbergis, P. (2011). CC.OO. ("Comisiones Obreras") — ISTAS (Union Institute of Work, Environment and Health) participatory action plan for a healthier work organization: A case study. Safety Science, 49(4), 591–598. doi:10.1016/j.ssci.2010.03.014

Mygind, K., Borg, V., Flyvholm, M.-A., Sell, L., & Jepsen, K. F. (2005). A study of the implementation process of an intervention to prevent work-related skin problems in wet-work occupations. International Archives of Occupational and Environmental Health, 79, 66–74. doi:10.1007/s00420-005-0016-0

Nielsen, K., & Abildgaard, J. S. (2013). Organizational interventions: A research-based framework for the evaluation of both process and effects. Work & Stress, 27(3), 278–297. doi:10.1080/02678373.2013.812358

Nielsen, K., & Randall, R. (2013). Opening the black box: Presenting a model for evaluating organizational-level interventions. European Journal of Work and Organizational Psychology, 22(5), 601–617. doi:10.1080/1359432X.2012.690556

Nielsen, K., Randall, R., Holten, A.-L., & González, E. R. (2010). Conducting organizational-level occupational health interventions: What works? Work & Stress, 24(3), 234–259. doi:10.1080/02678373.2010.515393

Ollé-Espluga, L., Menéndez-Fuster, M., Muntaner, C., Benach, J., Vergara-Duarte, M., & Vázquez, M. L. (2013). Safety representatives' views on their interaction with workers in a context of unequal power relations: An exploratory qualitative study in Barcelona (Spain). American Journal of Industrial Medicine. doi:10.1002/ajim.22220

Pitxer, J. V., & Sánchez, A. (2008). Estrategias sindicales y modelo económico español. Cuadernos de Relaciones Laborales, 26(1), 89–122.

Politi, C. (2011, February 10). Comment Renault et France Télécom gèrent le stress des salariés. L'Express. Retrieved from http://www.lexpress.fr/emploi/comment-renault-et-france-telecom-gerent-le-stress-des-salaries_960878.html

Prieto, C., & Miguélez, F. (2009). Trasformaciones del empleo, flexibilidad y relaciones laborales en Europa. Política Y Sociedad, 46(1), 275–287.

Quinlan, M. G., & Mayhew, C. (2000). Precarious Employment, Work Re-Organisation and the Fracturing of OHS Management. In K. Frick, P. Jensen, M. Quinlan, & T. Wilthagen (Eds.), Systematic occupational health and safety management: perspectives on an international development (pp. 175–198). Bingley: Emerald Group Publishing Limited.

Quinlan, M., & Johnstone, R. (2009). The implications of de-collectivist industrial relations laws and associated developments for worker health and safety in Australia, 1996-2007. Industrial Relations Journal, 40(5), 426–443.

Quinlan, M., Mayhew, C., & Bohle, P. (2001). The global expansion of precarious employment, work disorganization, and consequences for occupational health: placing the debate in a comparative historical context. International Journal of Health Services, 31(3), 507–36.

Reilly, B., Paci, P., & Holl, P. (1995). Unions, Safety Committees and Workplace Injuries. British Journal of Industrial Relations, 33(2), 275–288.

Robinson, A. M., & Smallman, C. (2013). Workplace injury and voice: a comparison of management and union perceptions. Work, Employment & Society, 27(4), 674–693. doi:10.1177/0950017012460307

Rubery, J. (2007). Developing segmentation theory: a thirty year perspective. ECONOMIES ET SOCIETES, 41(6), 941–964.

Sass, R. (1986). Workplace health and safety: report from Canada. International Journal of Health Services: Planning, Administration, Evaluation, 16(4), 565–582.

Shannon, H. S., & Cole, D. C. (2004). Commentary III - Making workplaces healthier: generating better evidence on work organization intervention research. Sozial- Und Präventivmedizin, 49(2), 92–94. doi:10.1007/s00038-004-0042-9

Shannon, H. S., Mayr, J., & Haines, T. (1997). Overview of the relationship between organizational and workplace factors and injury rates. Safety Science, 26(3), 201–217.

Stanzani, C., & Bridgford, J. (2002). Worker representation systems in the European Union and the accession countries (INFOPOINT-CES, ETUCO.). Brussels: Publications Office of the European Union.

Stolk, C. van, Staetsky, L., Hassan, E., & Woo Kim, C. (2012a). Management of occupational safety and health at work: An analysis of the findings of the European Survey of Enterprises on New and Emerging Risks (ESENER). Luxembourg: Publications Office of the European Union.

Stolk, C. van, Staetsky, L., Hassan, E., & Woo Kim, C. (2012b). Management of psychosocial risks at work: an analysis of the findings of the European Survey of Enterprises on New and Emerging Risks (ESENER). Luxembourg: Publications Office of the European Union.

Tregenza, T., & European Agency for Safety and Health at Work. (2009). Preventing harm to cleaning workers. Luxembourg: EUR-OP.

Vogel, L. (2001, June). A New Impetus for Community Occupational Health Policy. Debate on future Community health and safety policy. TUTB Newsletter, 17.

Walters, D. (1996). The effectiveness of employee representatives in health and safety at the workplace level in Europe. New Solutions: A Journal of Environmental and Occupational Health Policy, 53, 53–60.

Walters, D. (1998). Employee representation and health and safety: A strategy for improving health and safety performance in small enterprises? Employee Relations, 20(2), 180–195. doi:10.1108/01425459810211331

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

Walters, D. (2011). Worker representation and psycho-social risks: A problematic relationship? Safety Science, 49(4), 599–606. doi:10.1016/j.ssci.2010.09.008

Walters, D., Kirby, P., Faical, D., Great Britain, & Health and Safety Executive. (2001). The impact of trade union education and training in health and safety on the workplace activity of health and safety representatives. Great Britain, Health and Safety Executive.

Walters, D., & Nichols, T. (2006). Representation and consultation on health and safety in chemicals: An exploration of limits to the preferred model. Employee Relations, 28(3), 230–254.

Walters, D., & Nichols, T. (2007). Worker Representation and Workplace Health and Safety. Basingstoke: Palgrave Macmillan.

Walters, D., Wadsworth, E., Davies, R., Lloyd-Williams, H., & Marsh, K. (2011). Analysis of the findings of the European Survey of Enterprises on New and Emerging Risks on the effectiveness and support for worker representation and consultation on health and safety. Technical report. Cardiff: Cardiff University.

Walters, D., Wadsworth, E., Marsh, K., Davies, R., & Lloyd-Williams, H. (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. Retrieved from http://osha.europa.eu/en/publications/reports/esener_workers-involvement

Walters, D., Wadsworth, E., & Quinlan, M. (2013). Analysis of the determinants of workplace occupational safety and health practice in a selection of EU Member States. Luxembourg: Publications Office.

Walters, V., & Haines, T. (1988). Workers' Use and Knowledge of the "Internal Responsibility System": Limits to Participation in Occupational Health and Safety. Canadian Public Policy, 14(4), 411–423.

World Health Organization. (2012). Créer des lieux de travail sains qui favorisent l'équité pour les femmes et pour les hommes. Ouvrage de référence à l'usage des employeurs et des représentants des travailleurs. Geneva: World Health Organization. Retrieved from http://apps.who.int/iris/handle/10665/44307

Yassi, A., Lockhart, K., Sykes, M., Buck, B., Stime, B., & Spiegel, J. M. (2013). Effectiveness of joint health and safety committees: A realist review. American Journal of Industrial Medicine, 56(4), 424–438. doi:10.1002/ajim.22143