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ON PSYCHOSOCIAL RISKS PREVENTION
AND QUALITY OF LIFE AT WORK

Evaluation development of psychosocial risks in Europe

The state of scientific research and Institutional experiences

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Evaluation development of psychosocial risks in Europe: The state of scientific research and Institutional experiences

UNIÓN GENERAL DE TRABAJADORES
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Evaluation development of psychosocial risks in Europe: The state of scientific research and Institutional experiences

INTERNATIONAL YEARBOOK
ON PSYCHOSOCIAL RISKS PREVENTION AND QUALITY OF LIFE AT WORK

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OVERVIEW AND EXPERIENCES IN COUNTRIES OF CENTRAL EUROPE.

OVERVIEW AND EXPERIENCES IN NORDIC EUROPE.

Editorial Line

A DEBATE IN EUROPE, THE STATE OF SCIENTIFIC RESEARCH ON PSYCHOSOCIAL RISK ASSESSMENT AT WORK ENVIRONMENTS.

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In recent years several issues have been raised around the scientific basis of the analysis and evaluation of psychosocial risks, the main actors, the contents and purpose (Peiró, 2010). In what concerns the assessment of these risks, it is noticeable that the most frequent practice used in Europe is, largely, the performance of «external consultants» (Molina, 2010). Furthermore, most often evaluation methods used are questionnaires and this has advantages but also disadvantages, considering that it is sometimes difficult to interpreted the results, because they do not identify the need for intervention and do not take into account the specific organizational context (Molina, 2010). In addition, the *European Survey of New and Emerging Risks -Psychosocial Risks* (ESENER, 2010) shows a marked lack of activity of psychosocial risk assessment because, on average, only 26% of establishments in the 27 member states of the European Union (EU-27) states have procedures for cope with work-related stress.

These issues have raised the need to continue inquiring into the theories, methodologies and practices carried out in relation to the analyses and prevention of psychosocial risks in different contexts. In turn, make it urgent and necessary to know the developments taking place in Europe, both in terms of scientific research and institutional experiences because, as is known, although not always

Translation: Translation team.

practiced, the psychosocial risks assessment is a requirement derived from the European Directive and shared many demands and challenges.

The time is especially propitious. On the one hand, the European Commission has launched a public consultation to understand the perceptions and public input following the results of the evaluation of the European Strategy on Health and Safety at Work (2007-2012). The aim is to have relevant information to define the Community Strategy on Safety and Health at Work (2013-2020). On the other, the European Agency for Safety and Health at Work (EU-OSHA) will soon launch the European campaign from 2014 to 2015 aiming to promote «Practical solutions for psychosocial risks».

However, few countries have consolidated lines of research in the topic (Molina, 2010). Therefore, we have dedicated this volume of the Yearbook to the analysis and evaluation of psychosocial risks requesting the contribution of renowned experts from different European countries. It presents a number of studies describing different methodologies, procedures, researches and practices produced in a wide range of European countries, including Austria, Denmark, Spain, France, Italy, Portugal, United Kingdom, Ireland and Sweden. So, this volume highlights the rich variety of cultural, scientific and socio-economic traditions covered. We have tried to reflect the European diversity, incorporating studies from heterogeneous geographical-cultural areas. With it we want to show the north-south contrasts in this area, as well as among the continental world and European and Anglo-Saxon world. This diversity is an added value of this Yearbook.

Looking to the contributions from a more content focus perspective, these studies highlight the importance of psychosocial risk assessment in each of the countries included and the different factors relevant for an evaluation of this kind, such as, legal regulations and policies or the involvement and participation of all the organization in the risk management. In turn, these studies describe the existence and implementation of good practices in psychosocial risk management in the countries considered. All contributions note that psychosocial risk assessment continues to present challenges both theoretical and practical. In addition, each contribution provides some specific issues analyzed or originated from the approach adopted by the authors.

Some articles present a general overview of the situation in the country concerning psychosocial risk analysis. In this group we may mention first the contribution about psychosocial risks assessment in Spain. In it the authors describe from both theoretical and practical viewpoints the various methodologies and tools developed and used

for the psychosocial risks assessment. They also review a number of innovative approaches in research on stress and the development of evaluation methodologies.

Also with a comprehensive approach, the chapter on the developments made in this field in Denmark, shows various initiatives (both practical and research), with special emphasis on high involvement and cooperation from the unions, the different stakeholders and the authorities involved. Stand out the role of Prevention Fund, which aims to provide support for physical and psychological health prevention and develop of prevention packs. Organizations in high-risk sectors, can apply for funding to prevent them.

Two other studies provide a general overview, the one focusing on Austria and that on Sweden. Both contributions provide a broad overview of psychosocial risk factors that characterize the working life in these countries. Both studies, in addition to describing the legal framework governing workplace issues, analyze the emergence of new psychosocial risks. In the case of Austria, the author describes new job demands that have arisen as a result of social acceleration processes at work and changes in the its nature among which were the continuing changes in new technologies, intensified work, job autonomy and updating of knowledge and skills of workers to meet the more and more competitive labour market. Meanwhile, in the work about the situation in Sweden it shows a psychosocial risk categorization which includes flexible working, working hours, new psychosocial risks (such as excessive levels of autonomy and self-direction or the constant updating of skills) and organizational restructuring and job insecurity. In turn, this chapter also describes the initiatives carried out on a practical level, highlighting the role of social support, perception of justice and participation in decision-making as factors to consider.

In terms of procedure, the articles written on the developments and the situation in Italy and the UK and Ireland give different procedures on psychosocial risk assessment. This chapter describes the evaluation procedure proposed by current legislation, distinguishing between a first phase (focused on the evaluation of the factors of content and context of the work) and a later stage of depth assessment (focused on collecting learn more subjective). The authors emphasize the importance of collecting objective and subjective information using quantitative and qualitative methodologies.

The work made on England and Ireland shows the implementation of the Management Standards (Management Control Standards), developed by the Health and Safety Executive, which is based on a set of management standards to help employers, workers and their representatives to manage and reduce levels of work-related

stress. This process includes six areas considered good management practices in relation to the six main psychosocial risks in the workplace: job demands, control, support from management and peers, relationships at work, the clarity of role and organizational change. The study accounts for the development of a new standard specific management of psychosocial risks, the PAS1010, which will also be the subject of further analysis, in the Section of «best practices» in this Yearbook, joined with the Canadian standard of mental health management in the workplace.

The work developed in Portugal presents several case studies carried on by University researchers in which research as of various models of stress, diagnosis and psychosocial risk assessment is combined with professional interventions to prevent such risks or improve protection against them. The emphasis on cooperation between researchers and professionals and the researchers' involvement in professional practice are an interesting stimulus to promote such further integration between research and professional practice.

Finally, the chapter focused on France provides a more specific evaluation on accident causes. This approach emphasizes the importance of causal attributions made by both experts and non-experts about occupational accidents, as these contributions increase the objectivity and consistency of diagnosis and improve safety prevention and communication, therefore, improving also the assessment of accidents and the understanding of the attitudes and behaviours of their safety.

In short, in each of these studies, major progress in relation to the research, legal development, professional practice and performances of enterprises is presented. Nevertheless, in them it is also pointed the need to continue researching and go in depth in evaluation of psychosocial risks, both in terms of conceptualization and measurement and professional practice involving all stakeholders in the prevention of these risks. This issue of the International Yearbook seeks to contribute to the fulfilment of these needs, while stimulating, the debate on these issues and aiming to provide further elaboration of these issues rather than definitive answers to them.

Finally, this issue of the International Yearbook includes, sections devoted to both «new experiences» as «topics». They provide fresh account for the recent changes occurring in psychosocial risk analysis practice and research, their progress and their resistance. Theoretical analysis therefore combines well in volume with more experimental approaches.

In this second direction, the contributions kept both the National Institute of Safety and Health at Work as Spanish-Instituto Nacional de Seguridad e Higiene en el Trabajo - INSHT-European Agency for Safety and Health at Work - «Bilbao Agency», EU-OSHA-, included in the «institutional Experiences Section», we offer a rich outlook of growing institutional care on psychosocial risk assessment in the workplace. Although the situation is far from satisfactory, the paths of progress are relevant and should be strengthened in the near future, also for union activity and the creation of specific networks to subject as preparing the European Union Confederation-ETUC-.

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Doctrinal studies

1

Overview and experiences in countries of south Europe

SPAIN

ANALYSIS OF PSYCHOSOCIAL RISKS AT WORK: RESEARCH AND PRACTICE IN SPAIN*

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Summary

1. Introduction.

During the last decade there have been significant changes in the economy (such as the globalization of markets and the financial crisis), in the labor market and in the labor activity (work intensification and awareness, increased social and labor relations in equipment, introduction of new technologies...) and contractual and working relationships, which has led to an increase in the importance of psychosocial risks at work. Consequently, these risks are receiving more attention in the legislation and policy of risk prevention and promotion and guarantee of job security.

The legislation, both Spanish and European establishes the obligation of the employer to evaluate and prevent occupational hazards (including psychosocial ones). In this sense, the European Commission's Social Agenda for the promotion of health and safety at work (2007-2012), has been insisting on the need for evaluation and prevention these risks. All these legal requirements require the development of appropriate technology to conduct reliably and valid psychosocial risk assessment. In fact, since the nineties, publications have been carried out on the challenges and achievements in this field (see, among others, Peiró & Bravo, 1999; Meliá et al., 2006; Guàrdia, 2011). In this sense, these changes in labor markets, labor relations, business, and the nature of work require further revisions of the assumptions on which research on psychosocial risks has been developed.

The aim of this article is to provide a brief overview of the current state of psychosocial risk assessment in Spain. To do this, we will analyze the question basically on two levels. On the one hand, we analyze the macroscopic data on working conditions in Spain taking into account the results of the National Survey of Working Conditions (ENCT, «Encuesta Nacional de Condiciones de Trabajo») conducted by the National Institute of Safety and Health at Work (INSHT, «Instituto Nacional de Seguridad e Higiene en el Trabajo», 2011a) and the European Working Conditions Survey (EWCS), conducted by the European Foundation for the Improvement of Living and Working Conditions. On the other hand, we also review the main models and tools developed to analyze the psychosocial risks in business.

The present work is organized, then, in the following sections. In the first one, the main theoretical models that underlie the methodologies of psychosocial risk analysis available in our country are reviewed. The second section provides descriptions of the assessment methodologies and tools. Subsequently, trends are analyzed in research on this topic and practical experiences. And finally, we discuss the main issues and some innovative proposals on the subject.

2. Main theoretical models in psychosocial risk at work analysis in Spain.

If we analyze the results offered at the macro level by the surveys conducted about working conditions in Spain it should be noted that, the documents presented do not provide clear references on the theoretical foundation that inspired the design of these surveys (VII-ENCT or V EWCS). Nevertheless, given the psychosocial factors considered, it can be inferred that the theoretical model grounding the study in that of Karasek's Demands-Control (1979). In fact, many of the questions included in the survey refer to the demands at work and some also request information about the control the workers have on those demands and other resources.

Moreover, if we look at the tools developed explicitly to analyze psychosocial risks in companies, there is a greater diversity of theoretical models that are based on different theories about work stress. These models vary depending on the additions made over time and the objectives of their own methodologies. In this sense, some assessment tools are based on classical theories of stress, based on the mismatch between the person and the job (e.g., the model Demands-Control, Karasek, 1979), while others deal with the exchange of contributions and between employer and worker compensation (like the Effort–Reward Imbalance model, Siegrist, 1998). Other instruments have been developed based on more complex models, such as the RED Model of the WONT Research Team (Salanova, Cifre, Martínez & Llorens, 2007) or the AMIGO model for analysis and organizational management (Peiró, 1999).

Among the models based on the mismatch between person and work, highlights the Demands-Control model (Karasek, 1979). Its hows the role of control or decision making to reduce the negative effects of high levels of job demands. Workers that have high (physical and/or psychological) demands in their work environment and low control or decision-making capacity in their jobs are having higher levels of stress. This model was extended by Johnson and Hall (1988); including the Social Support as another central moderating variable stating that the lack of social support from coworkers and supervisors also generates a stressful work environment, as well as the high demand accompanied low control. More recent reviews of this model have led to the Demands–Resources model (Demerouti, Bakker, Nachreiner & Schaufeli, 2001), which, considers control as an important resource but it also pays attention to the importance of other resources such as climate support, participation or variety of tasks among others. In this sense, much of the model-based methodologies such as the Istas-21, the DECORE and the Risk Assessment Questionnaire and Identifying Psychosocial Risk Situations of the Navarro Institute of Health (INSL, «Instituto Navarro de Salud Laboral»), proposed as a key in the intervention to increase worker's control. Several studies have pointed out the need to pay attention to other organizational and environmental phenomena and

personal characteristics of workers, increasing thus the relevant variables in the model (Rodríguez, Bravo, Gracia, & Peiró, 2000, Rodríguez, Bravo, Peiró, &Schaufeli, 2001, Rodríguez, González, &Carbonell, 2007).

Regarding the models based on the exchange of contributions and compensation between employer and employee, the Effort–Reward Imbalance model (Siegrist, 1998) should be enhanced. It highlights that the imbalance in that sharing is harmful to the health of workers. This model considers as rewards, among other things, granted employment status (e.g, job security or promotion perspective), esteem (support, respect and recognition) and salary. Therefore, the realization of high effortand low reward pose in a long term, a stress situation. This model, like the previous one, has been used to justify the methodologies Istas-21, DECORE and INSL Questionnaire.

In addition to these two models, other methodologies such as the F-PSICO, developed by the National Institute of Safety and Health at Work (INSHT), are based on different theories of stress, motivation and satisfaction. There is a whole set of theories as the model of Task Characteristics (Hackman &Oldam, 1975), the Michigan model (French &Kahn, 1962), Socio-technical model (Cherns, 1987) and Warr's Vitamin model (1987), who consider stress as a negative psychological response with cognitive, emotional and behavioral components, which produces negative consequences for the health of individuals and for the results of organizations. Regarding the theories of motivation and satisfaction, there is a high degree of complementarities between the two. Although the motivation theories do not address all psychosocial factors, they are used to design and improve the working environment in order to respond to the needs and expectations of workers. Meanwhile, satisfaction theories explain how the amount of employee satisfaction depends not only on objective factors, but also on psychosocial and interpersonal relationships that arise in the company.

As discussed above, in addition to more traditional theoretical models, several research teams have developed more complex models for the study of psychosocial risks, such as the RED model, the AMIGO model (Analysis, Management and Intervention Guidelines for Organizations) (Peiró & Martínez-Tur, 2008) or the Psychosocial model of accidents at work.

The RED (Resources, Emotions/Experiences and Demands) models based on the extension of the Dual Process model (Scahufeli & Bakker, 2004) that has resulted in the Dual Spiral model. It is presented as an extension of Demands-Resources model, combining the negative aspects of stress with a more positive approach of it, within the broader movement of the Positive Organizational Psychology (Salanova, Martínez & Llorens, 2005). The

proposal states a negative component of stress to health due to high demands, beside one related motivator proper management of resources to meet the demands. More recently, this model has been extended, including personal resources such as self-efficacy (Salanova, Bresó, &Schaufeli, 2005).According to this model, workers with low levels of self-efficacy will perceive lower environmental demands and minor labor resources, generating job stress, which in turn decreases the efficacy, triggering a downward spiral. By contrast, workers who perceived more self-efficacy, perceived fewer demands and more labor resources, which in turn generate less burnout and higher engagement, this lead to an increase ofefficacy, triggering a positive spiral (Salanova, Llorens, Cifre,&Martínez, 2006). Thus, the RED model considers stress as a process of interaction between the job demands and job and personal resources, enabling the prediction of positive and negative results (Salanova, Llorens, Cifre, &Martínez, 2006).

The «Analysis, Management and Intervention Guidelines for Organizations» model (AMIGO model) (Peiró, 1999), allows the identification of a wide range of relevant components (facets) to detect psychosocial risks in the organization. The study of the relationship between these facets allows a dynamic view of the relationship between them. These facets are grouped into three categories: strategic (mission, culture, relationship with the environment, vision, and strategy), the 'hard' ones (infrastructure and economic resources, structure, technology, and work system) and the 'soft'ones (climate and communication of Human Resources policies and practices, management and leadership, and working people and equipment). It also includes aspects relating to dynamic adjustment and the psychological contract (Peiró, 2006, 2007). All these facets will have an impact on performance. It is important to note that this model considers the organization as a system made by different groups or «stakeholders» (owners, managers, employees, suppliers, customers, etc.) to raise the assessment.

Meanwhile, the Psychosocial model of Accidents at Work (Meliá, 1998) highlights the psychosocial nature of accidents. It is posed as a chain of effects that involve variables of the organization and the individual. These two interact, contributing to the emergence of industrial accidents. According to the chain, the security environment affects the security response of the controls (supervisors), and this in turn, to the security response of the colleagues. These three responses have an influence on the safe/unsafe worker´s behavior. This set of responses and the baseline risk, act as antecedents of actual risk, which then acts as an antecedent of workplace accidents (Meliá, 2004a). According to this, it is a model that takes into account all levels of the company (managers, employees) and baseline risk threshold of the job.

There are other methods, such as INERMAP, that are not based on a specific theoretical framework, but on different theories and models that support each of the risks in order to control the working conditions so that they can affect the health of workers. To this end, they are based on experiences of experts in prevention (prevention technicians, safety representatives, etc.) and theories of the psychology of work and organizations (such as Hersey and Blanchard's leadership theory, the Hacker's action theory or Warr's vitamin model).´

In conclusion, a wide range of theories underpin the tools and methodologies for the assessment of psychosocial risks. Most of these methodologies are based on analysis of mismatch between person and work, and in the exchange of contributions and compensations between employer and employee. However, there are models that go beyond, including other psychosocial theories as the AMIGO model, the RED model, and the Psychosocial Model of Accidents at Work.

3. Main methodologies and tools used in Spain in evaluating psychosocial risks at work.

The National Survey of Working Conditions (ENCT) provides information about psychosocial risks from a representative sample of the Spanish occupied population, providing information about the presence, in varying degrees, of different psychosocial risk factors. It includes exposure to job demands such as workload, time pressure, complex work versus monotonous work, and emotional demands. It also asks about the degree of autonomy (in the order of tasks, method of work, the working pace, distribution and duration of pauses, and implementation of ideas), social support (colleagues support, supervisor support, and utility of the work) and the occurrence of violent behavior at work (threats of physical violence, physical violence, sexual harassment, verbal abuse and discrimination). On its side, the European Working Conditions Survey (EWCS) raises questions about the demands and intensity of work, the need to hide feelings and emotions in performance, emotional demands, autonomy, support from supervisors, conflicts, work-family relationship, work and job insecurity, violence and harassment. In both cases, the differential analysis disaggregating data for different groups based on their demographics or other occupational variables, is useful to obtain an overview of the situation in Spain on these issues.

There are a number of methodologies aimed to measure and to analysepsychosocial risks in business. They have been reviewed in several publications (see Melia, Nogareda, Lahey, Hardcore, Peiró, Salanova & Gracia, 2006; Guàrdia, 2008, Moreno & Báez, 2010). It is interesting to briefly describe these methods and also to see the theoretical

basis that inspired their design. A good portion of them has been based predominantly on the Demands-Control model (Karasek, 1979) and its later developments. Other methodologies have been based on approaches such as the model Effort–Reward Imbalance or other approaches to work related stress.

The *Psychosocial Risk Assessment, Identification of Risk Situations Questionnaire* has been created by the INSL (Lahera, 2006). It is composed by four measurement factors: participation, involvement and responsibility; training, information, and communication; time management; and, group cohesion. Its psychometric properties (reliability and validity) have been tested on purpose in different studies (Guàrdia, 2008).

The *CoPsoQ* developed by the National Institute of Occupational Health, Denmark, has been adapted and widely used in our country under the name of ISTAS-21. It measures the following types of variables: dimensions of exposure (double presence, quantitative psychological demands; cognitive psychological demands, emotional-psychological demands, psychological demands about hiding motions, sensory-psychological demands, influence, development opportunities at work, control over working time, meaning of work, integration in the company, predictability, role clarity, role conflict, quality of leadership, reinforcement, social support at work, possibility of social relations, group feeling, job insecurity, esteem) and dimensions of health, stress and satisfaction (job satisfaction, general health, mental health, vitality, behavioral symptoms of stress, somatic stress symptoms, cognitive symptoms of stress). This questionnaire has good psychometric properties and it is available in different versions that allow to fit it to the size of the organization (see Moncada, Llorens, Font, Galtés & Navarro, 2008).

The *Multidimensional DECORE Questionnaire* for assessment of psychosocial factors in the work environment has been developed at the Complutense University of Madrid. It aims to assess workers' perceptions on the following factors: reward, organizational, cognitive demands, and control. Several studies have provided empirical evidence of its reliability and validity.

The *Assessment Method of Psychosocial Factors, FPSICO,* developed by the National Institute of Safety and Health at Work (INSHT) (see Nogareda, 2006), also focuses on the perceptions of employees on different aspects of their work and aims to assess seven factors: mental load, personal autonomy, job content, supervision, participation, role definition, concern for the worker, and personal relationships. The psychometric properties are satisfactory (see Ferrer, Guilera, &Peró, 2011). However, the empirical evidence of this method is limited. Currently, the FPSICO 3.0 has expanded the number of variables considering the emotional demands, exposure to conflict or violent behavior, and the consideration of working time which include aspects of work-life balance.

The *RED-WONT Questionnaire,* (Resources, Emotions and Labor Demands) of the Universitat Jaume I (Salanova, Llorens, Cifre & Martínez, 2006), offers a multifactor instrument that provides assessment on various psychosocial risk factors (job demands, job resources, social resources and personal resources), as well as the consequences of those risks (psychosocial damage, organizational costs and endangering psychological well-being). Empirical evidence exists on the reliability and validity of the instrument (Salanova et al., 2006).

The *«Prevenlab-Psychosocial» methodology from the University of Valencia* (Peiró, 2006) is composed by a qualitative part and a quantitative part. Both tools collect information about the different facets covered by the «Analysis, Management and Intervention Guidelines for Organizations model» (AMIGO), described in the previous section. This method allows the evaluation of the risk intensity and its frequency of exposure. The combination of both measures provided an index of the severity of being exposed to that risk. In addition, it also includes information about the perceived equity of the relationship with the company and the propensity to leave the organization or work unit by the worker. Data about reliability, validity and other psychometric properties have been provided by Peiró (2006).

The *battery of psychosocial factors of occupational health* of the University of Valencia *(Meliá, 2006),* consists of a structured set of instruments that collect information on the following factors: descriptive aspects of the person, the position and the organization; indicators of accidents; stress in the workplace (general psychological health, stress and experienced anxiety associated with work, role conflict, role ambiguity, and role overload); job satisfaction (intrinsic satisfaction, satisfaction with working conditions, received benefits, satisfaction with supervision, with the participation, and other factors of job satisfaction); dysfunctions concerning the quality, productivity and supervision; and psychosocial dysfunctions (mobbing, burnout, and propensity to leave). The psychometric properties of the instrument show high reliability and validity (see Meliá, 2004b)

The *INERMAP methodology* of the Institute of ergonomics MAPFRE (Gracia, 2006), consists of a dual procedure (direct observation and questionnaire). The questionnaire is composed of the following factors: distribution and design, communication, leadership, mental load, turn, and social satisfaction. Publications available on the instrument do not present data about their psychometric properties. It also has an interesting evaluation complementary proposal (Psicomap, Edumap, Sanimap, etc...) known and used, but with no open access.

The battery for the evaluation of psychosocial risks for SMEs has been developed by the MC-Mutual and University of Barcelona (MC-UB) (Pérez &Gallego, 2006). It is based on a process of triangulation to obtain information through

a questionnaire, a check-list of the technician and a structured interview on management control. It provides information about seven factors: Organization of the work, communication, training and development, social and group effects, participation, work contents, and requirements of the task and the work environment. This method shows a high reliability and validity of content (Guàrdia, 2008).

In summary, in recent decades a diversity of characteristics and conditions for applying different methodologies has emerged in our country. Elsewhere, we have analyzed the similarities and specificities of them in terms of contents. Also, the main issues and challenges regarding the evaluation of psychosocial risks have been discussed (Peiró, 2010).

4. Main researching trends in psychosocial risks assessment.

The analysis of situation of the research on the evaluation of the conditions of work, occupational safety and health in Spain (INSHT, 2011b) has provided an overview of the state-of the-art on this area. According to this study, 25.49% of the centers in Spain (related to the prevention of occupational hazards) carry on research on psychosocial risks. In this sense, the document highlights the following institutions in the performance of this activity: National Center of Work conditions CNCT), Centre for research in occupational health (CiSAL), INSL (Navarra), Institute of safety and occupational health (ISSL) of Murcia and the Asturian Institute for prevention of labour risks (IAPRL). In addition, it is important to mention various units and research centers in a good part of the universities and some foundations and mutual insurance societies for accidents at work that also do valuable work in this area. Research in occupational health centers is, in good measure, applied and focused on the development of instruments, and in some cases, on intervention models. Together with them, survey research has also been carried on, with the aim to give an assessment of the situation at the country level. In universities, to get her with applied research, research is also performed to compare and develop models of relationships between psychosocial risks and its antecedents and consequences. This has contributed to a better understanding of the occurrence and possible effects of these risks.

As we have pointed out, European and national working conditions surveys provide representative data on various issues of interest. The European survey allows to compare the Spanish situation with other European countries, showing that Spain is in an intermediate position in terms of the perceptions of intensity of work (55.8%), and falls

below the average (23.2% compared to 25.5%) in having to hide true feelings in the work situation. The percentage of Spanish workers who have contact with the public, lies above the European average (53.9% compared to 44.1%). Regarding the support received from managers, the results for Spain are also above the average (75.4% vs. 59.7%).

The National survey on work conditions(ENCT) also provides data to analyze the temporal evolution of the situation in our country, being the comparison of last survey with the previous one, an element that allows us to identify the changes during economic crisis (INSHT, 2011a). Since 2007, the proportion of workers who must work very fast has increased (46% versus 44% in 2007) and also the frequency of workers who must attend several tasks at the same time (41.2% in 2007 and 45.3% in 2011). In addition, a higher percentage of workers report the need to pay a high level of attention during the work (67% in 2007 and 77.6% in 2011). In connection with the performance of complex tasks, the percentage does not change between 2007 and 2011 (21% approx.), however increases the percentage of workers who have much work and feel burdened (24% versus 20.3% in 2007) and those who have contact with the public (64% compared to 58.6% in 2007).

In addition to these macro data, research carried out in Spain on psychosocial risks at the company level, has predominantly dealt with three issues: the development or adaptation of assessment instruments and the analysis of these risks, the matching of different theoretical models about the relationships between these risks and their consequences, and the case studies of companies where a psychosocial risks assessment has been applied or the effectiveness of prevention actions has been proved.

Studies aiming to develop or adapt tools for measurement and analysis of psychosocial risks have focused mostly on the development of scales and questionnaires and the determination of its psychometric properties. There are publications that validate the methodologies that we have described in the previous section. Among others we can mention the study of Ferrer, Guilera, and Peró (2011) on FPSICO 3.0, the one of Moncada, Llorens, Font, Galtes, and Navarro (2008) on ISTAS-21, the published by Peiró (2006) on the Prevenlab. Studies on other methodologies have also been published such as the one of Lahera (2006) on the questionnaire of the INSL, Melia (2004b) on the PREVACC and Salanova et al., (2006) on the RED-WONT methodology. In this line, it is worth mentioning works that compare two or more methodologies. Thus, Dalmau, Ferrer and Rodríguez (2010) compared FPSICO and ISTAS-21 questionnaires in relation to the evaluation of the mental load in jobs with tasks of supervision and control in various sectors. In addition, there is extensive research in the development of evaluation tools on specific sources of

stress, such as role stress, harassment and insecurity in employment, work overload or temporary pressure, breach or violation of the psychological contract (see Peiró, 1999) and the psychological harassment in the workplace (Salanova, Cifre, Martínez, & Llorens, 2007).

A second group of studies has aimed to test models about the relationships between psychosocial risks and its consequences, and to determine the background to those risks. These models have been formulated from various theories of occupational stress and pose the determination of the antecedents of the risks and the consequences thereof, as well as the mediating and moderating variables involved in those relationships. There are several revisions that have synthesized the contributions and progress made on these issues in Spain (see e.g.: Peiró, 1999, 2010; Moreno & Garrosa, 2013). Several studies have focused on the analysis of psychosocial risks as antecedents of health (Garcia, Luceno, Jaén & Rubio, 2007). Others expand the models of stress, as well as the aspects to take into account providing a better understanding of the damage-generation processes of as part of the risks analysis and their prevention. We can mention here, the stress studies carried out from an exchange approach such as the imbalance between contributions and compensation or the ones on the breach and violation of the psychological contract (Guest, Issakson & De Witte, 2010). Other studies have focused on the dynamics of power in organizations (Peiró & Melia, 2003), leadership (Peiró & Rodríguez, 2008) or conflict (Gamero, González-Romá, & Peiró, 2008). Still others have analysed the psychosocial risks and their influence on health and well-being from the social comparison theories or from the analysis of organizational Justice (Cropanzano, Goldman,& Benson, 2005) Moliner, Martinez-Tur, Peiró & Ramos, 2005; Moliner, Martinez-Tur, Peiró, Ramos, & Cropanzano, 2008). Other research has addressed the violence in the workplace or harassment at work (Zarco & Rodríguez-Fernández, 2010), that can also be characterized as work-related stress. Research in this field has shown the way in which psychosocial factors can be indicative of psychological harassment (Baron, Munduate, & White, 2003;Meseguer de Pedro, Soler, García-Izquierdo, Saez & Sánchez, 2007) and the variables that are related to the incidence of harassment practices such as the organizational climate and some psychosocial processes (Muñoz, war, Baron & Munduate, 2006).

More recent studies are paying attention to formulate and test causal models, analyzing the relationships between multiple variables, which provide more comprehensive visions of the complexity of the phenomenon. Other recent studies deal with the analysis of collective stress and multilevel relationships between different variables, clarifying several emerging processes of collective stress and also the influence of the social context on the individual experiences of stress. Positive psychology has also been contributing to recent research on the relationships between psychosocial risks and employees' well-being at work. Moreover, the longitudinal studies have incorporated the

dynamics and change of these phenomena but still in a very limited and partial perspective. It is not possible to review here all the contributions made in the last decade in these different fields of research. We only will mention some works of each of the mentioned lines in a very shallow way. Thus, several studies have examined the collective stress in work units and organizations (see, De Cuyper, Notelaers & De Witte, 2009; Peiró, 2008; 2009; Peiró & Tetrick, 2011), and the temporal aspects, based on longitudinal research (see Carmona, Buunk, Peiró, Rodríguez, & Bravo, 2006; González-Morales, Peiró, Rodríguez,&Bliese, 2005; Peiró, Rodríguez & Bravo, 2003; Rodríguez, Bravo, Peiró & Schaufeli, 2001). Also a number studies have been published on work-related stress from the perspective of positive psychology (Salanova, Bakker & Llorens, 2006;Salanova & Schaufeli, 2009), in which positive effects of stress at work are analyzed in addition to those that impair or harm the health of workers.

The third block of studies that are going to be briefly mentioned here are the case studies that are developed presenting the results of the evaluation of interventions carried on in specific companies. These studies are usually linked to professional practice, so will be covered in the next section.

5. Practice in assessment of psychosocial risks in companies.

The professional practice of the psychosocial risks assessment in Spanish companies evolves slowly. At European level, the ESENER survey (2009) places Spain practically in the average of the European countries in terms of the concern by the stress at work. In fact, in the countries of southern Europe, Spain is the most sensitive country with psychosocial risks and the most prone to adopt measures. Despite this, Spain is nine percentage points below the European average in what refers to the availability of procedures to prevent, control or management of those risks. This survey also shows that a high percentage of Spanish companies (68%) rely on external sources to manage psychosocial risks.

At the State level, the national survey of management of safety and health in enterprises (ENGE), published in 2009, indicates that psychosocial risks are the aspects less frequently included in the plans of health and safety. The 35.7% of the surveyed companies report that they have that plans, while a 15.3% explicitly states otherwise. The survey only offers information broken down for the construction sector. This survey also highlights that 27.6% of the companies has not conducted any assessments to measure psychosocial risks, and this data presents a certain discrepancy with the information obtained in the European poll. By sectors, the agrarian is the one presenting fewer

evaluations (32.2% of companies do not evaluate those risks), followed by industry (28.5%) and lastly services (27.2%). By size, smaller firms are the ones that less evaluates such risks. In fact, explicitly state that those risk are not evaluated in 29.2% of the enterprises with less than 10 employees; 27.6% of enterprises between 10 and 49 employees; a 23.7% between 50 and 249 employees; 13.7% of the enterprises between 250 and 499; and 18% of the companies with more than 500 employees.

During the last years the Andalusian psychosocial risk Observatory (LARPSICO) has published studies on the professional practices in psychosocial risks analysis in SMEs in Andalusia. In general, the results of these studies (Arias, 2010; Arias & Carmona, 2011) indicate that although the main reason to carry on those assessments are external requirements (e.g.: inspections), the awareness of employers about the need to assess these risks psychosocial is increasing slowly. These studies indicate that assessments of psychosocial risks occur, to greater or lesser extent, in all kinds of companies, being the most used methods: FPSICO, ISTAS-21, the INSL questionnaire and the scale of stress at work of the European Foundation for the Improvement of the Quality of Working life. The studies of Arias and colleagues highlight the existence of discrepancies between the results of the quantitative and the qualitative analysis based on interviews.

There are some publications that report psychosocial risks analyses carried on in certain sectors and enterprises. For example, Otero and Dalmau (2006) presented data for the health sector, Lopez, Carrion, Pando and Angel, (2008) in the steel sector, Simo and Perez, (2006) in public administrations (see for other sectors Salas & Meliá, 2006; and Ranchal, Rodríguez & Cantarero, 2006).

The importance of the evaluation of psychosocial risks, given the legal obligation of its implementation and the progressive awareness of employers, has encouraged the proliferation of consultancy firms and service companies in this area (see for example, Psya; Audit & Control Estrés; CAPRESA, etc.). These companies provide services for analysis and diagnosis of psychosocial risks, audits and prevention policies, the promotion of the quality of life at work, etc.

Another type of developments are concerning applications for SMEs by the Office for the prevention of occupational hazards of Foment Nacional del Trabajo, the research groups, such as WONT of the University Jaume I from Castellón, the IDOCAL Research Institute of the University of Valencia and other centers that provide services of risk assessment. It is also worth mentioning here, the computer application on the operating model for the management of occupational violence from external source published in 2011 by the INSHT. It is a tool for small businesses that

allows assessments related to occupational violence and the subsequent planning of actions to prevent it.
Recently in Spain, a series of actions have been initiated in order to improve and facilitate the evaluation of psychosocial risks. We can highlight the guide of performances of the Inspection of Labour and Social Security (ITSS) on psychosocial risks developed by the General Direction of the ITSS and the National Institute of safety and hygiene at work (INSHT) in 2012. Before there were others documents such as the general procedure of evaluation of psychosocial risks posted by the INSL in 2005 or the annual publication on psychosocial risks that made Fes-UGT presented at the occupational health Conference in 2010.

The work of trade unions is also relevant in this field on different fronts. Actions developed include the promotion of applied research on tools and methods of evaluation, the support to launch scientific publications on these themes, like the one which includes the present article, and the formation of workers in health and safety issues and the promotion and dissemination of the relevance of all these actions.

Finally, it should be noted that the recent publication of the certification standard ISO 10667, on the provision of evaluation services (procedures and methods for the evaluation of people in business and organizational environments) will have a significant impact on the practice of evaluation of psychosocial risks. It is likely that in the not-too-distant future, if it starts to demand the implementation of such standard in enterprises, the practice of such assessments will be improved. On the other hand, the recent publication of the new guide for the Inspectors on psychosocial factors, published by the Inspectorate of labour and Social Security (ITSS, 2012) also represents an advance over the existing situation. It specifies the main risks and how to determine if they have been satisfactorily analyzed in the organizations.

6. Main issues discussed and innovative proposals.

Given the progressive generalization of the practice of psychosocial risk assessment, in the field of scientific research several issues have been debated both, in the professional practice and in the inspection function regarding these issues. Some of those issues are fundamental questions about the meaning and purpose of the assessment, and some other refer to methodological issues that have an impact on the quality of the evaluation itself. Elsewhere Peiró (2010) has reviewed some of these issues. Here we review the contributions of other authors on these issues.

The psychosocial risk assessment itself is sometimes a matter debated. Ferrer (2010) poses the dilemma of assessing or not, giving a series of arguments for (such as a positive attitude towards prevention as an investment in health, welfare, efficiency and effectiveness) and against (such as not all people exposed to sick risks present health problems).

However, the practice of evaluation is being progressively consolidated in companies. Nevertheless, in their provision other issues of methodology are relevant. So, Guardia and Peró (2010) point out the limitations of methods based on self-reported scales, since they are essentially unchangeable and can not be adapted to specific interests. Furthermore, those based only on scales and/or questionnaires have limitations given that these methods allow only obtaining a systematic organization inference analysis. Other methodological issues refer to the variety of methods and their adequacy. There is no sufficient consensus on the basic risks that should be considered in any evaluation and perhaps the set of basic risks should be established as a function of several variables such as size, sector etc. Under these conditions each instrument has made its own proposal. As pointed out by Molina (2010), the most widely used questionnaires as FPSICO and ISTAS-21, both have advantages and disadvantages. According to Molina (2010), the FPSICO 3.0 is insufficiently implemented in companies and does not offer a full guarantee of relevance to the needs of enterprises, especially SMEs. Moreover, the ISTAS-21 suffers from some difficulties in its implementation and development. In connection with the methodological issues there is the one raised about the equivalence between measured constructs. A study by Dalmau, Ferrer and Rodríguez (2008) states, for example, that F-PSYCHO and ISTAS-21 cannot be considered equivalent in the evaluation of mental workload.

Moreover, research on risk prevention and health promotion, often suffer from several limitations. As pointed out by Molina (2010) neither the concept itself, nor the catalog of psychosocial risks, nor protection policies, constitute sufficiently settled realities in the scientific community and society. From a broader perspective, Peiró and Lira (2013) have pointed out some potential extensions that would provide a more comprehensive view of the phenomena studied. They suggest to address occupational stress not only or predominantly from a perspective focused on their negative aspects that is individual-centered, and considers mainly the reactive coping aiming to mitigate the negative effects of stress. According to these authors, this has led to the assumption that the individual is primarily responsible for managing their stress at work and this may reduce the importance of cultural and structural factors of the organization involved in the process, minimizing the responsibility of it, in control and prevention of stress.

In the face of such issues, several authors have made innovative proposals. On one hand, regarding the diversity of methods, Molina (2010) points out the need to promote studies that convert psychosocial risk assessment in a basic object of scientific analysis in order to provide assurance of validity and reliability of the measurement tools (see also Peiró, 2010). In turn, Moreno and Báez (2010) state that an important goal of research in this field is the development of an epidemiology of risks, in order to meet health data linked to psychosocial risks and their different factors in different fields of work.

Regarding methodological issues, Guàrdia and Peró (2010) propose the use of methodologies based on the combination of quantitative and qualitative instruments, because the exclusive use of questionnaires and scales are not appropriate in the case of small and very small businesses (SME) (Romero, Guàrdia & Peró, 2010). These authors also pose an integrative approach to the assessment, according to which it must perform at first a comprehensive study of the organization that serves the initial detection. Subsequently, more specific studies should be conducted based on questionnaires with good psychometric properties, followed by a stage which will compare the results with more qualitative approaches, and finally make a promotion phase of innovations and improvements (see also for a modular approach Peiró, 1999, 2006).

Recent research on stress in our country is breaking new ground, raising its evaluation in a more proactive way to consider diagnosing those signs to anticipate threats and opportunities. It also insists on a multilevel approach that considers the collective phenomena of stress. Furthermore, Peiró (2010) points out the need for further studies which try to determine causal relationships, especially taking into account the dynamic evolution of risks and threats. In turn, research on psychosocial risks also should consider the risks arising from the lack of equity in the exchange of contributions and compensations between employee and employer and the mechanisms that influence the perceptions of inequity, and social comparison (Buunk, Zurriaga, Peiró, Gosalvez, & Nauta, 2005; Carmona, et al., 2006).

8. Summary and conclusions.

This paper provides a review of the state of the art of the assessment of psychosocial risks in Spain, the progress made in recent times, the main issues discussed, as well as future challenges and innovative proposals. We have reviewed the main contributions of macro-level studies on the status of these risks in Spain, along with the analysis

carried out at the micro level of companies. At the macro level, we analyze the main results of the Spanish and European surveys on working conditions. The first offers the possibility to identify changes during the period of crisis of the last seven years, while the second allows comparing the Spanish situation with other European countries situation. At the company level, we have focused our attention on the review of existing methodologies to assess psychosocial risks and the research that has based its development. We have paid attention to the research which has been carried on work stress and the models aiming to determine the emergence of various psychosocial risks (or job stressors), their consequences and the moderating and mediating variables in these processes. We have also considered the relevant input from research for professional practice and vice versa.

In conclusion, we note that research in Spain on these issues has been broad, though somewhat fragmented and uneven in terms of thematic priorities and risk analysis utility for both professional practice and for inspection as on compliance with the law in this field. We believe that it is necessary to develop more ambitious research programs that systematically address basic issues and that are supported by public bodies with responsibilities in these matters. These programs could also count with the support of the mutual accident at work insurance companies, different institutions interested on these topics, as well as with leading research groups in the universities of the country. This research should start from an analysis jointly developed by researchers, practitioners and inspectorate professionals on existing priorities to improve the models, methodologies and procedures for the assessment of psychosocial risks and should take into the analysis and constraints identified in review publications. Furthermore, international, especially European cooperation, should facilitate the incorporation of developments and experience made in other countries. In this context, this chapter aims to contribute to the progress in the crosswalk lines.

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FRANCE

NAIVE CAUSAL EXPLANATION AS A WAY OF ACCIDENT ANALYSIS AND PREVENTION

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Summary

Abstract:

Risk assessment and accident analysis constitute important and a prerequisite for any serious prevention action. This chapter presents an original approach for the evaluation of accident causation that we are developing since several years. It proposes not to limit oneself to the expert analysis while designing preventive measures, but also to take into account the causal point of view of individuals facing risks daily: workers, policy makers, investors, managers, stakeholders in organizations, etc. (Kouabenan 1985 a & b, 1999, 2002, 2006, 2009). This can be achieved by two complementary ways, spontaneous or naive causal explanations and risk perception. For brevity, this chapter focuses on the presentation of an overview of the work on the naive explanation of accidents (Kouabenan, 1999, 2006, 2009). This approach considers that to effectively curb accidents, it may be advantageous to take into account the explanations provided spontaneously by ordinary people, not experts in security issues. It relies on the idea that the search for explanation when confronted with negative, unusual or dramatic events such as accidents concerns both lay people and experts. We briefly describe what constitutes this approach, and how beliefs can influence explanations and safety behaviors. Then we show that the explanations provided spontaneously by the lay people, but also by experts, are often biased and may impact risk assessment, accident analysis and safety behaviors. We show that naïve causal explanations tend to guide behavior and that knowledge of biases and psychological mechanisms that underlie them is therefore becoming a serious avenue to explore in order to enhance accidents prevention. Illustrations taken from studies that demonstrate the effect of some variables on naïve causal explanations are presented. We conclude on the usefulness of this approach for the diagnosis and security expertise as well as the communication on safety and accident prevention.

Keywords: causal explanation, causal attribution, risk assessment and accident prevention, beliefs.

1. Introduction: Beliefs and the evaluation of risks and accidents.

Assessing risks and accidents causation is one of the essential steps in prevention strategies and risk management. According to us, all the actors of a risk situation should be involved in assessing risk and accidents causes, but not only experts and managers as it used to be. Indeed, we believe that the observed indifference vis-à-vis the prevention of accidents and non-compliance or lack of massive adherence to the security measures and actions could result from different «readings» of the same situation, but also of poor risk communication and how to control them. Such a situation can be generated by different and sometimes biased risk and accident causation representations.

Indeed, representations and beliefs operate at all levels of risk management. They influence especially the perception of risks related to the work environments and spontaneous (or naive) explanation provided for accidents. These perceptions and explanations will in turn influence the decisions and prevention actions (Kouabenan, 1998, 2009). Representations and beliefs also guide political or strategic, economic and cultural choices of the type and the level of risk deemed acceptable, unavoidable or useful. Moreover, the choice of actions to counter risks harmful effects, the assessment of one exposure and the decision to protect oneself, as well as the receptivity and the adherence to prevention messages, rely on representations and beliefs. The ambivalence in terms of the effects of risk that may be positive or negative, the ambiguity and complexity of risk situations and the issues they raise, even make the assessment of risks and accident causes more dependent upon individuals and social groups. Representations and beliefs allow the individuals to get an idea of the risks they are exposed to, but also to make causal inferences from the perception of the elements in the environment and their perceived ability to cope with. Identifying representations and beliefs of workers or employees, but also of policy makers, investors, executives, stakeholders in organizations and all those who engage in risky activities, is to give the means to understand their attitude vis-à-vis security issues and behavioral choices they make and how to act effectively (See Kouabenan, 2006). According to us, beliefs usually manifest themselves through two complementary phenomena, the causal inferences or explanations spontaneously provided for accidents and the perception of the risks inherent to the situation.

For brevity of the presentation but also for clarity, this article is limited to the presentation of the work on spontaneous or naive causal explanation that people provide for accidents and which is an approach we have been developing for several years and that open promising application (Kouabenan, 1985 a & b, 1999, 2002, 2006, 2009). We briefly outline what constitutes this approach, and describe how the beliefs and explanations from them can influence safety behaviors. We show that the explanations provided spontaneously by laypeople, but also by experts are often

biased but tend to guide their behavior. We show how knowledge of these biases and the psychological mechanisms that underlie them are becoming important to explore in order to improve the prevention of accidents. We illustrate by studies on the effect of certain variables on causal explanations and conclude on the usefulness of this approach for the diagnosis and safety expertise as well as for the communication on safety and accident prevention.

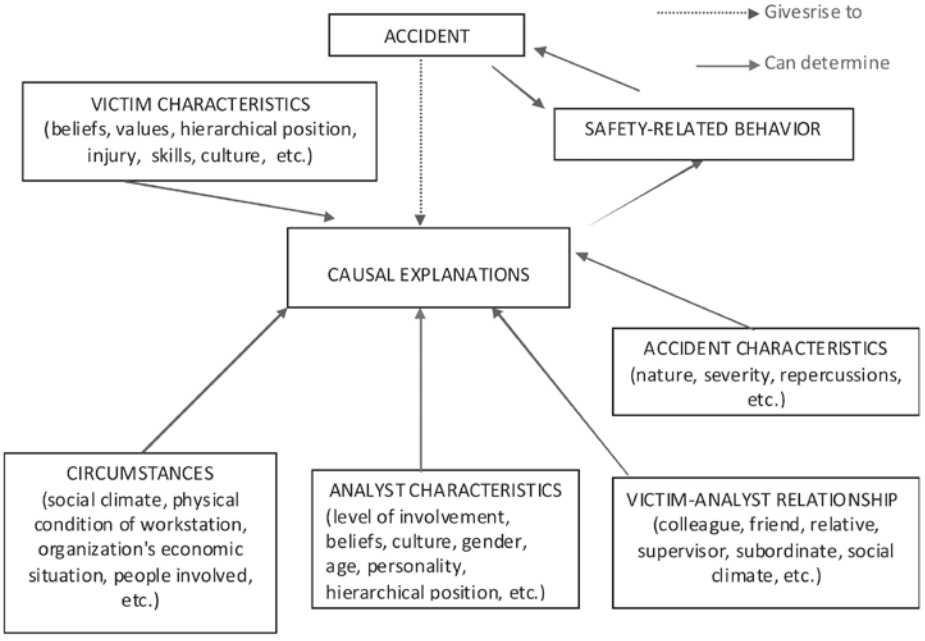
2. The naive causal explanation's approach: Theoretical bases and model.

It is often said that accidents prevention is or should be everybody's business. In the same vein, we believe that the analysis and explanation of the accident should also involve all stakeholders facing risky situations. We consider that to effectively curb accidents, it may be advantageous to take into account the explanations provided spontaneously by individuals faced with risks and accidents, whether specialists or not for safety issues. Unfortunately, accident analyses are usually carried out by experts or by the hierarchy without involving those directly dealing with risk and accident situations. According to us, such a view is limited and can be enriched by taking into account the assessments and explanations provided by ordinary people. Indeed, the processes of causal inference are often implemented implicitly or explicitly, when the individual is confronted with a strange or unusual adverse event, and are present in all phases of the analysis of accidents or risk management. Causal explanation helps to reassure oneself that we live in a regular and controllable environment. The lack of explanation, however, intrigues and generates a state of more or less transient and unbearable psychological imbalance. Therefore, the explanation and prevention of accident appears logically as a major concern for both specialists and operators facing risks. Indeed, even if they do not use a scientific approach, ordinary people, almost spontaneously develop their own theory of the causality of the accidents which they observe, or at the origin of which they are, or for which one of their colleagues or acquaintances, or themselves are victims. They are guided in this by their representations of the causality of the accidents, their previous experiences, their system of beliefs, and diverse cognitive capacities and motivational dispositions among which the need for control. Like Heider (1958) who speaks about «naive analysis» of the action, we are talking about naive causal explanation to describe the explanation provided spontaneously for accidents by ordinary individuals (Kouabenan, 1999). These explanations are called naive because they often arise from representations, beliefs and experiences, and do not rely on rigorous and proven methodologies like expert explanations. For us, all explanations, whether naive or expert, subjective or objective, make sense and should be taken into account in the analysis and prevention of accidents.

Such an approach is all the more necessary that the experts who generally design preventive measures have not the same rationality as the laymen who must implement them. It is rightly believed that one of the reasons why risk management is puzzling is that experts and laymen, approach it differently. They have different and sometimes even opposite rationalities (Kouabenan, 1999). Better, a number of studies indicate that non-experts individuals tend to rely more on their own judgment than that of experts (Flynn, Slovic & Mertz, 1993; Prince-Embury & Rooney, 1987). Furthermore, the situation in which the accident occurs is very often ambiguous so it is not easy to infer causes with absolute certainty. Thus, authors such as Slovic, Fischhoff, and Lichtenstein (1981) showed that experts and laymen are subject to biases in their assessments of the risks and causes of accidents. It could easily be understood that the explanation offered by lay people are biased because they bear the marks of their subjectivity, their cognitive limitations, their motivations, experiences and socio-cultural values. But the ones of experts are also biased because they always rely on intuitive elements, especially when generating hypotheses and designing the research, even if later, they use scientific methods. Bias in experts' assessments may also result from their original training, their subjectivity in relation to their personal and professional experiences, but also their motivations and the stakes of the expertise they load. The selection of the situations and the variables to analyse and the kind of assumptions formulated are all potential sources of bias related to the subjectivity of the expert, whatever the method used. «Unbeknownst to them, the a priori ideas and attitudes, even the cultural patterns of the observer or analyst about the causes of accidents in general and this particular accident, will have an influence on the facts they will withhold, that they will value and those they will consider immediately as unimportant and that they may neglect ... « (Goguelin, 1996, p.84). It is however not possible or even necessary to establish any hierarchy between the two rationalities. One can not say for example that experts' explanations are more valid than those of the profane, or vice versa. Both seem essential and complementary and are at the heart of preventive action. The study of this subjectivity seems highly instructive not only in theory but also in practice. It helps to understand scientifically, the explanation of the ordinary individual, but also, it can be the engine of the preventive action process. We agree with DeJoy (1994) who argued that causal inferences provided more or less regularly by employees, supervisors, managers and safety experts on events related to hazards in their organization, largely determine their behavior towards risks and accidents prevention. Therefore, the assessment of the causes of accidents is an integral part of the formal analysis of risks and accidents.

The model of the naive explanation of the accident that we have developed (Kouabenan, 1985a, 1999) postulates that any accident gives rise to a search for causal explanation, either implicitly or explicitly. This approach involves all stakeholders in the situation of an accident regardless of their status or level of responsibility in the organization.

Causal explanations are usually influenced by variables related to the characteristics of the victim (hierarchical position, age, nature of injury, sex, etc.), those of the person making the analysis of the accident (system of beliefs and values, hierarchical position, degree of involvement in the accident, sex, age, risk perception and his capacity to cope, etc.), the relationship between the analyst and the victim or the protagonists of the accident (colleague, work supervisor, subordinate, etc..), the characteristics of the accident severity of the consequences, type of accident, etc.) and surrounding circumstances (work climate, safety culture, physical state of places, economic organization, social environment, etc.). In turn, the resulting explanations are likely to influence attitudes and behavior vis-à-vis security. If these behaviors are inappropriate, it can promote the occurrence of an accident. Finally, being a victim of an accident can influence the attitudes and behavior vis-à-vis safety (see Figure 1).



This model applies to the subjective evaluation of the causes of any type of accidents: occupational, road, sports, health, domestic, etc. For the purposes of this chapter, we will provide in the following sections, in so far as possible, some illustrations from occupational accidents, but sometimes also examples from other hazardous areas.

3. Beliefs and accident explanation.

Because of the uncertainty that contain the notions of risk and accident, their evaluation and their explanation constitute moments favourable to the expression of beliefs and inferences. Indeed, beliefs can compensate for the lack of rational explanation and give meaning to accidental events or risky situations very complex, uncertain or ambiguous. They also lead to inferences about the relationships between things and opportunities to prevent or counteract adverse effects thereof. These inferences in turn allow individuals to structure their environment and nurture the feeling to recover a sense of control. The notion of belief can be defined as the degree of conviction or adherence in an idea, an object, a proposal or a value. We can cite for example the religious beliefs that refer to a deity, normative beliefs (what is believed to be the expectations of the reference group - subjective social norm), control beliefs (perceived control or sense of control), role beliefs (what we believe that others expect of us because of our status). One can also quote fatalistic beliefs that are related to a non-controllable object (i.e fate) and cultural beliefs conveyed by culture.

The role of beliefs in explaining accidents has been stated several times in the work (See Kouabenan, 1985a, 1999), but very few studies check it directly. Nevertheless, we can mention some studies on the relationship between the causal explanation of accidents and fatalistic beliefs, religious beliefs, and control beliefs. Some authors (Morris & Peng, 1994; Hewstone, 1993; Hewstone, 1994) showed how in Western and non-Western societies, negative events, disasters, even natural, were explained by witchcraft, conspiracy, persecution or looking for a scapegoat. According to Shaffer (1984), the fatalist favours in his explanations the personal causality to the impersonal causality and considers that, whatever is the way which we borrow, the events are inevitable. However, Kouabenan (1998) observed that the fatalistic participants generally tend to attribute the accident to external and uncontrollable factors, outside the control of drivers (*infrastructure, others, fate*) and tend to minimize the role of factors involving their initiative (*sudden change of direction, reckless, failure to comply with stop signs, pedestrians contempt, impatience, etc*.)»(p.249). In addition, the author notes that fatalistic explanations of accidents are related to greater risk-taking. This result is confirmed by Peltzer and Renner (2003) who showed that for participants who have strong fatalistic

beliefs, the main cause of accidents is bad luck. Moreover, « whether or not fatalism is invoked to explain accidents can depend on educational level, but even more on how a person relates to accidents. Frequent and repeated exposure to catastrophes and social distress can reinforce such beliefs » (Kouabenan, 2009, p.772).

Turning to religious beliefs, Gyekye and Salminen (2007) found in a study on the explanation of occupational accidents, that workers belonging to the Muslim religion or traditional African religion provide more contextual and external causal explanations than Christians « in a way that seemed to reflect the fatalistic belief that accidents occur inevitably and are beyond human control » (p.409). As in Kouabenan study, they observed that followers of Muslim or African traditional religions adopt higher risk-taking behaviors and have more accidents than Christian participants. However, Norenzayan and Lee (2010) show that regardless of ethnicity, Christians are more fatalistic than non-believers, and regardless of religious membership, Canadians of East Asian origin make more attributions to fate that Canadians of European origin. For the authors, the first result is mediated by belief in God and the second by the causal complexity of the event. Ngueutsa (2012) examined precisely the effect on causal explanations of belief in divine control measured by a scale inspired by Goggin et al. (2007, cited by Ngueutsa, 2012) that ignores any reference to any religious doctrine. He noted that the participants with strong beliefs in divine control provide less controllable external explanations than those whith low beliefs in divine control.

Moreover, studies that address the impact of control beliefs on the explanation of accidents lean on the locus of causality. They suggest that control beliefs such as positive illusions promote internal causal explanations. So DeJoy (1989) showed that drivers who allocate accidents to human factors are also those who see themselves as more competent than others. In the same vein, studies on locus of control and naive explanations confirm that individuals who believe they have a personal control over events (internal individuals) are more willing to provide internal explanations for accidents, including when they are themselves victims (Phares & Wilson, 1972; Schiavo, 1973; Sosis, 1974). Schiavo (1973) showed for example that when they analyze a highly unlikely accident for themselves, internal individuals tend to show more defensive and self-protective in their attributions than the externals ones, because the possibility that an accident could happen to them is opposed to their belief that they have control over their environment.

Beyond beliefs (fatalistic, religious or control), many studies show that various individual, organizational and socio-cultural factors influence causal explanations provided for accidents.

4. Organizational and socio-cultural determinants of accident explanation.

We retain here two axes of presentation reflecting the variation of the explanations by the role or the status in the organization, the degree of satisfaction and according to the group, cultural or ethnic membership.

4.1. Impact of hierarchical position and group affiliation on causal explanations.

Several studies have established that factors related to the positions of actors (social status or hierarchical position occupied in the organization, integration and satisfaction in the organization, etc.) affect the causal explanations provided for accidents (Kouabenan, 1999, 2002, 2006, 2009; Kouabenan, Gilibert, Médina and Bouzon, 2001, Gyekye, 2010). The largest number of studies relate to the hierarchical position occupied in the organization. Thus, several studies showed that people with a high position in the hierarchy of the organization tend to explain accidents by factors that primarily involve the causal responsibility of subordinates (inattention, failure to comply with security measures, inexperience, etc..), while subordinates tend to attribute them to factors that are primarily related to the organization (time pressure, lack of equipment or poor equipment and facilities, lack of protective means, etc..), to executives or management (lack of training and awareness of security issues, focus on performance, etc..) and bad luck. Such explanations reflect a defensive attribution trend or bias whereby each hierarchical level denies being the cause of the accident and appears to dismiss the causal responsibility on another level. As an illustration, in a first systematic study with 320 workers in French telecommunications, Kouabenan (1985a) found that supervisors assign a great importance to factors attributable to subordinate causal role: inattention, carelessness, inexperience, failure to comply with safety rules. On the contrary, he noted that the subordinates attribute more important causal role to factors falling on the organization and to the management (bad working conditions, defects of the material (or equipment), time pressure, inadequacy of safety instructions, lack of training and sensitization of executives on safety problems, priority granted to the efficiency, etc.), and in factors outside their control, for example bad luck. In two other studies in different sectors of activity (ski, nuclear), Kouabenan et al. (2001) confirmed in a pretty nice way the defensive tendency for members of a given group to make internal attributions incriminating the members of the outgroup and exonerating the members of their group by highlighting this time external explanations. More exactly, when supervisors explain an accident which occurred to a subordinate (outgroup), they call upon more internal factors to the subordinate victim while the subordinates make more external attributions to the victim when he is a subordinate as themselves (ingroup). Similarly, subordinates explaining an accident occurring to a supervisor

(outgroup) tend to significantly make more internal than external attributions to him. Here we found the trend towards defensive attribution described by Shaver (1970) and Shaw and McMartin (1977), particularly a tendency to self-protection or the protection of the image of their group by managers and subordinates. These findings are supported by several other studies. Thus, in two studies with workers from the outdoor work crew division of a large utility company, Hofmann and Stetzer (1998) showed that supervisors tended to make more internal attributions about the causes of work accidents than the workers who tended to blame situational causes for the accident. Similarly, in a study involving 320 Ghanaian industrial workers from mines and factories, Gyekye and Salminen (2004) found that subordinates victims of accidents explain them more by external factors than their supervisors who explain them more by factors internal to the employee. Such a tendency for defensive attribution based on the role or status in the organization is observed with various populations including owners of small businesses in the construction sector and metal industry (Hasle, Kines & Andersen, 2009). Better, Lacroix and Dejoy (1989) showed that supervisors relied on worker effort as a causal factor even when conflicting data were provided (p.97). Along the same lines, by analyzing accidents resulting in principle from several causes that are linked, DeJoy (1987) showed that whatever the chain of causes, supervisors always attribute a greater causal role to causes internal to subordinates, even when the causal data are confusing. Brickman et al. (1975) conclude that depending on the position one holds in the organization, he can during the analysis of an accident reassemble the causal chain until he ultimately identifies the internal causes involving the other hierarchical level.

4.2. Impact of satisfaction and organizational context on the explanation of accidents.

There are also differences in the causal explanations provided for accidents depending on the level of commitment or satisfaction in the organization, membership of a trade union, professional or social status in a hazardous situation (Gyekye, 2010, Gyekye & Salminen, 2006a, Kouabenan, 1999, 2002, Hasle, Kines, et al., 2009). In a study in the French public sector company, Kouabenan (1985a, 1999) showed that the level of integration in the organization as measured by the satisfaction reported, actually introduces bias in the explanation of accidents. In this case, the less employees are satisfied, the more they tend to explain accidents externally by attributing them particularly to factors related to the organization: inadequate safety measures, deficiencies in equipment, lack of awareness among supervisors. Similarly, dissatisfied employees incriminate relatively little carelessness or negligence of subordinate employees. Finally, we can say that the explanations are indicative of certain shortcomings to the extent that dissatisfaction with an organizational element motivates a causal attribution to that element (Kouabenan 1985a

1999). In the same vein, Gyekye and Salminen (2006a) observed that dissatisfied workers explain the industrial accidents in a more external way than their colleagues satisfied with their work and tend to have a higher involvement in accidents.

Besides, we can note that that accidents severity is a factor which tends to accentuate the defensive explanations, especially in the presence of a strong situational[1] and personal relevance[2] between those involved in the accident and those explaining it (Kouabenan, 1999, Kouabenan et al. 2001; Shaw & McMartin, 1977). Thus, in a situation with a strong situational relevance, but a low perceived similarity between the victim and the analyst, we observed more internal explanations to the accident victim when it is serious. By cons, in a condition of a strong situational and a strong personal relevance between the victim and the analyst, we noted more external causal explanations when the accident is serious. In both cases, we observe trends to defensive attribution, either towards harm avoidance (first case) or towards blame avoidance (second case) (See Shaw & McMartin, 1977).

However, safety climate appears as a moderating factor of the defensive explanations. Thus, Barao, Silva and Lima (2006) cited by Gonçalves, Silva, Lima and Melia (2008), observed that « workers belonging to companies with stronger positive safety cultures (e.g. with very good safety training and communication) interpreted and explained work accident causes with more complex approach, combining internal and external attributions » (p.999). Better, Hofman and Stetzer (1998) showed that the defensive tendency to external explanations is accentuated when safety climate is bad and attenuated when safety climate is positive. In this case, when safety climate is good, or when the organizational context provides a very open exchange on safety-related issues, it is observed that workers « were more likely to make internal attributions when the evidence in fact implicated the worker » (p.654).

4.3. Effect of the cultural or ethnic membership on the explanation of accidents.

The explanations provided for accidents may also vary according to the culture or ethnic identity. Examples of differential sensitivity to the explanations and in particular to the fundamental attribution error according to culture are reported by several authors (Bierbrauer, 1992; Kouabenan, 2001; Morris & Peng, 1994). It seems that the tendency

1 The situational relevance refers to the probability that the accident could befall the analyst as well

2 The personal relevance is the perceived similarity between the stimulus person described in the accident and the person who is explaining the accident (gender, appearance, beliefs, values, etc.)

to favour dispositional explanations at the expense of situational explanations is more prevalent in individualist cultures than in collectivist cultures, especially for the explanation of social events (Morris & Peng, 1994) and for adults for whom the reference to the roles and group norms is clear. Morris and Peng (1994) showed that Chinese (collectivist) are less subject to the «fundamental attribution error»[3] than American (individualistic), but only for the explanation of social events and not for physical events. In the same vein, Hewstone (1994), « observed that adults who came from non-occidental cultures generally accorded less importance to dispositional explanations than did adults from American or European cultures » (cited by Kouabenan, 2009, p.772). For their part, Choi, Dalal, Kim-Prieto and Park (2003) note that Koreans make more external attributions than Americans because they take into account more information than Americans.

However, despite the interest that culture represents for naive explanations, there is little research examining the relationship between the system of cultural values and beliefs and accidents explanation. Nevertheless, we can cite some examples. We can nevertheless quote some examples. Wang and McKilip (1978) ask Chinese students, American students and U.S. citizens residing in small towns, to explain an accident in which the driver involved is, either an American who knocks down a Chinese, or a Chinese driver who knocks down an American. The assignment of responsibility appears to be based on ethnic identity for Chinese American students and residents of small towns, but not for American students. Bias towards in-group favouritism is observed for the two ethnic groups.

In a comparative analysis in the field of occupational accidents, Gyekye (2006) showed that Ghanaians workers (collectivist culture) make more contextual explanations than Finnish employees (individualistic culture) who provide more internal and dispositional explanations. The strong tendency to provide external or situational explanations in collectivist cultures may be explained either by the desire to protect the cultural group to which one feels connected (Bierbrauer, 1992), or by the desire to preserve social harmony which is a stabilizing factor of the group. Indeed, when an individual is stigmatized and devalued, his family and his group membership are also affected in the eyes of society (Gyekye, 2006). This trend can also be explained by an implicit theory which assesses behavior from a mental representation based primarily on contextual information (Gyekye, 2006, Morris & Peng, 1994), or « a more holistic conception of the person as being situated in a broad social context » and a view of dispositions as being more malleable (Choi, Nisbett, & Norenzayan, 1999, p.47).

3 The fundamental attribution error refers to the fact that people generally tend to attribute the causes of events to the individuals involved in them, and tend to neglect the causal importance of situational factors.

5. Individual determinants of accidents explanation.

This point will be illustrated by examples of studies on the effect of socio-demographic variables (age, gender) and accident experience on causal explanations.

5.1. Gender and accidents explanation.

Studies on the role of gender in the explanation of behavior and accidents have sometimes resulted in contradictory results. Some concluded that there was an influence of gender on causal explanations, and others did not find this effect. It seems that the works which do not find the effect of gender on the causal explanations (Shaw and McMartin, 1977; Taylor and Kleinke, 1992) did not take into account the lack of relevance of the situation for the participants because the sexual identity treats only the perceived personal similarity with the stimulus-person. Shaw and McMartin (1977) argued for example that gender does not influence the explanations unless the personal and situational relevance are differentiated for both sexes. In a study taking into account the relevance of the task for the participants, Whitehead and Hall (1984) found that women attribute more causal responsibility than men to an individual involved in an accident during the execution of a feminine occupation while men and women attribute much responsibility to the individual engaged in a masculine job. In a second experiment, the authors obtain a net effect of sex going in the direction of a defensive attribution based on situational and personal relevance between the actor and the person who explains the accident. In this case, women consider the behavior of the actors involved in the accident and engaged in a feminine occupation as being more reliable and secure than do men, while men consider the behavior of the actor in a masculine task as more reliable than do women. Likewise, in a study on the explanation of occupational accidents by young workers, Breslin et al. (2007) noted that « whereas the females emphasized how their complaints were actively disregarded by their superiors, males (and some females in male-dominated work settings) described how they stifled their complaints in order to appear mature among their ( ) co-workers » (p.782). There are many examples in the field of traffic that confirm the idea advanced by Walster (1966), namely that women attribute more responsibility to the stimulus person (male) when the consequences of the accident become severe, which is not the case for men (cf. Kouabenan, 1999). A more subtle result is however obtained by Kouabenan et al. (2001) in a study of employees of the French national Electricity and Gas Company. These authors showed that the causal attributions of male supervisors were more internal when the accident was serious while women executives provided less internal attributions to the subordinate victim when the accident was

serious. They believe that this may be due to certain empathy for the victims. It is also possible that independently of the fact that the described accident could a priori involved a man as well as a woman, that the work of the victim has been considered by the women as typically male and that the situational relevance of the accident-stimulus was perceived as low for the female participants. Additional studies are needed to further clarify the role of gender on the naive explanations of accidents.

5.2. Age and accidents explanation.

Research on the effect of age on naive explanations is relatively few. They reproduce the trend to defensive attributions observed in previous studies on other variables such as gender. Namely that people of a certain age think that accidents are mainly due to people of other age groups, and that they are more equipped to deal with dangerous situations. That implies a better sense of control from their part.

The most numerous examples of the effect of age on accidents explanation, however, are found in the area of road accidents (Kouabenan, 1999). It seems that assignments of causal responsibility intensify as and when the age of the stimulus-person increases (Shaver, 1970). Shaver (1970) observed, however, that although individuals attributed more responsibility to the alleged perpetrator of the accident when he was older, they were more lenient when he was the same age or younger than them. For the author, such an explanation may be more a reflection of a cultural norm translating a legal and moral tradition which consists in considering that an elderly person has to show himself more responsible than the fact of a bias of self-protection. However, in other studies (Sheehy & Chapman, 1986 quoted by Kouabenan, 1999), it seems that children are legally and socially disadvantaged when they are involved in accidents with adults, because they are subject to a greater attribution of responsibility and a low credibility.

Gyekye (2010) reported studies in industrial context which show that older subordinates explain accidents by external causes than do their younger colleagues. Similarly, older supervisors tend to explain the accidents by external and unpredictable causes while their younger colleagues explain them much more by organizational causes. Along the same lines, Melia, Chisvert and Pardo (2001), cited by Niza, Sila, and Lima (2008) showed that older workers were more likely to attribute the accident to external factors while younger workers tend to refer internal attributions.

5.3. Involvement in the accident and causal explanations.

It is observed that the victims and witnesses of the accident explains them differently and particularly in a defensive way. In a field study with 150 French telecommunications officers, including 99 victims and 51 witnesses of accidents, Kouabenan (1985b) observed that the victims explain them more by external factors beyond their control or their causal role while the witnesses explains accidents more by factors within the causal role of the victim (Kouabenan, 1985b). A similar result was found in several other studies which showed that generally speaking, the experience of an accident leads to defensive external explanations (Gonçalves et al., 2008, Niza et al., 2008, Kouabenan, 1985b, Salminen 2002, 1992). Thus, in a study involving 209 employees including 73 victims of serious accidents, 65 colleagues of the victim and 71 foremen, Salminen (1992) found as Kouabenan (1985b), that accidents victims attributed them more to external factors, while their colleagues and supervisors attribute them to factors internal to the victims; foremen trying to minimize their own responsibility by emphasizing the non-compliance with work procedures by victims, denying that they may tolerate risk-taking, and highlighting the good organization of safety practices in the company. Furthermore, following interviews with 56 victims of accidents of various sectors (services, health, industry), Niza et al. (2008) found that the experience of an accident leads to defensive explanations («focused on causes external to workers») and defensive definitions of the accident (« highlighting the sudden nature of accidents and organisational weakness ») (p.959). In addition, in a study with 117 witnesses of industrial accidents, Gyekye and Salimnen (2006b) showed « that co-workers (witnesses) who had some perception of situational and/or personal relevance with the accident victims attributed less responsibility to the accident victims than did their counterparts who had no perception of relevance » (p.157). Always in accordance with the criteria of relevance and the trend towards defensive attributions (Shaver, 1970), we note that the relatives of the victim (parents, friends, or acquaintances), typically provide explanations that reflect their empathy for the victim, in particular explanations more external than internal (Winkel & Denkers, 1995). Finally, Gonçalves et al. (2008) found that the number of accidents suffered is positively related to external causal explanations and unsafe behaviors among employees of an industrial enterprise and a research and development firm. On the contrary, they are negatively related to internal explanations. In fact, the more the individuals are involved in accidents, the more they tend to believe that they are caused by factors beyond their control and to engage in unsafe behaviors. For these authors, although some research suggests that the experience of accident led to more cautionary behaviors (Kouabenan 2002, Laughery & Vaubel 1989 cited by Gonçalves et al, 2008), it seems really more difficult to predict safe behaviors than unsafe behaviors.

6. As a conclusion: application prospects.

Naive explanations, expert explanations: a necessary complement to better assess the causes of accidents and act more effectively for prevention.

As one might guess, the study of naive causal explanations of accidents has important applications with regard to prevention. Indeed, not only are these explanations likely to influence the behavior of their authors vis-à-vis safety but also they can influence decisions and prevention strategies and adherence or non-adherence of operators to preventive programs. This approach complements advantageously the assessment and intervention process by the expert. Its practical interest can be illustrated by this sentence of Slovic et al. (1981): «Subjective judgements, whether by experts or lay people, are a major component in any risk assessment. If such judgements are faulty, risk management efforts are likely to be misdirected» (p. 17). Indeed, any preventive action relies on relevant and consistent assessment of the causes of accidents. This assessment of accidents causes may refer to objective causes such as may describe experts, but must also take into account the subjective assessment of the causes by employees and those directly facing risks. Like the safety specialists, the worker or employee, the business owner, the supervisor, the engineer-designer of a production system, etc., far from being passive in the face of the accidents they experience or observe, almost always make, implicitly or explicitly, causal inferences. « These causal inferences, in turn, broadly determine the actions that are taken or not taken to correct hazards and prevent injuries » (Dejoy, 1994, p.3). DeJoy (1994) even believe that « in a very real sense actions to manage safety derive more from attributions than from actual causes » (p 3).

The few examples provided in this chapter show however that the naive causal explanations provided for accidents very often comprise biases, generally of defensive nature, insofar as they relate to external factors ascribable to the intervention of others, or situational elements or fate, in particular when the person who explains the accident, is, in a certain way, involved. They are on the other hand internal or related to the victim or the protagonists of the accident when the person who explains the accident is not directly concerned or is emotionally far away from the protagonists (Kouabenan, 1999; Kouabenan and al., 2001; Gyekye & Salminen, 2006b). The knowledge of these biases, whatever their origin (cf. Kouabenan, 1999), is of great benefit to understand the attitudes and behaviors vis-à-vis safety but also safety expertise and diagnosis as well as for prevention and for risk communication.

Better understanding the attitudes and behaviors towards safety.

Regarding the *attitudes and behaviors towards safety,* it may be noted that the biases in the naive explanations of accidents can help to understand why in some circumstances, for example, basic precautions at first sight have not been taken, why in others objectively dangerous behaviors were adopted, sometimes consciously and why in still others, avoidance actions or less risky course of action were not undertaken. Indeed, certain forms of defensive external explanations can lead their authors to indifference, even to passivity in front of the risk and a negligence of the safety measures. For example, a worker who believes that accidents are due to fate or uncontrollable external factors may tend not to actively engage in prevention programs. Similarly, the fact that managers or employers explain accidents by factors internal to subordinates, may lead them to overshadow in prevention policies, external factors such as working conditions, time constraints, the various pressures of production or the need to be competitive, the hardship of work, the deficiencies in equipment and working tools and protective equipment. For example, several studies (Lacroix and Dejoy, 1989; Kouabenan, 1999, p.208) showed that the internal explanations that make supervisors or executives generally generally lead them to take punitive measures or education acts firstly directed towards the workers or the employees, but few corrective actions on the level of the work conditions or the sensitizing of the executives, elements which can however prove to be obstacles with regard to safety.

Increasing the objectivity and consistency of the expertise and safety diagnosis.

Explanations may also *illuminate the expertise and safety diagnosis*. Indeed, the analysis of an accident is not neutral and has issues both in terms of moral, economic and / or financial responsibility. Because of these challenges, one tends very often to confuse at the time of the explanation of the accident, the search for causes with the search for the culprit, an approach likely to activate defensive reactions. However the naive explanations, especially if they are defensive, may generate a conflict between the various stakeholders concerned with the situation of accident on not only the causes considered to be relevant, but also on the nature of the preventive measures which could be regarded as most suitable. In order to protect himself, everyone might be tempted to challenge or justify a cause identified if he perceives that it falls within its or her role and responsibility or as involving someone close to him. This can result in a deterioration of the social climate and risk communication, which is a process unfavourable to safety. Consequently, it is appropriate prior to any operation of collective analysis or explanation of the accident, to well clarify the objective of the analysis. It is especially important to exonerate by privileging the objective of prevention

to the detriment of the responsibilisation and repression, and to create a climate which supports confidence and participation.

It is also advisable to take care of the quality of the data collected for safety expertise. Indeed, to understand an accident, one often resorts to a collection of testimonies from the victims and various actors of the situation of the accident or their direct line managers. But given the various possible biases, one can fear distortions in these data (attempt of survalorisation or dissimulation of certain facts with an aim of self-protection or protection of a colleague or a close relation). Therefore, it is necessary to be capable to identify and combat biases likely to lead to concealment of facts or overstatement of others, for the sake of objectivity and effectiveness. Knowing these biases also invites to be attentive with the exploitation of the data which one obtains on the accidents and with their sources, but also to ensure that when collecting data « to diversify as possible information sources, to recut the information, to design supports of reports of accidents which go in the sense of the most exhaustive and objective collection on the circumstances of the accident and which avoids any temptation of interpretation, to value what goes in the direction of an effective prevention of a similar accident, etc. « (Kouabenan, 2006, p. 250).

Lastly, one must encourage a participative approach in the operations of accidents analysis by associating people from various professional and hierarchical backgrounds. Of course in the very hierarchical organizations, it is not easy to make collaborate people of various hierarchical levels, but that comprises unquestionable advantages. The confrontation of causal analyses coming from various sources, not only contributes to inform about possible biases or divergences during the analysis of an accident, but also provides an interesting lighting on the causal complexity of the accidents. Indeed, by allowing employees to confront in a contradictory way, their own causal analyses with causal analyses coming from various sources, we awaken in them critical thinking and enable them gradually to understand the diversity of factors involved in the occurrence of an accident.

Taking the heat out of risk communication and better target preventive actions.

Finally, the approach of the naive explanation of accidents is very promising for *prevention and risk communication*. Indeed, one of the conditions for the success of prevention programs is the adherence of the operators concerned by them and their willingness to implement them. This adherence depends on their perception of the accuracy and relevance of the causal analyzes that underlie these preventive measures. Such a perception is facilitated if their

causal beliefs are included in these analyzes. What matters is not so much the intrinsic effectiveness of prevention measures; what matters is that those who are in charge of implementing them believe they are. This does not mean that the intrinsic quality of preventive measures is not important. It means that the perceived relevance of these measures to the people who are the recipients is crucial for their actual and efficient implementation. It is difficult to assess the effectiveness of a measure that is not applied or is without conviction. This perceived relevance is further enhanced by associating the workers or laypeople not only to the causal analysis of accidents, but also to the definition of prevention. We have shown in a pharmaceutical company that the participation of workers to the safety diagnosis and definition of prevention can positively contribute to the design of ergonomic adjustments more consistent and more accepted (Kouabenan, Dubois and Bouverot, 2003). This participation not only helps to enrich preventive measures, but also to stimulate workers greater motivation to implement them because best understood.

In addition, the taking into account of the naive explanations can *improve the information and communication systems* around the analysis and prevention of accidents. The confrontation of points of view allows clarifying the different perceptions of accident causation, to remove ambiguities, to enhance the credibility and representativeness of information, to dissipate fears and alleviate conflicts. An awareness of bias and their origins, for example during safety training, allows stakeholders in the analysis and prevention of accidents to understand the different points of view and be more willing to integrate the viewpoint of others. By involving employees or stakeholders not specialists in the analysis of accidents that affect them it stimulates not only their power of control, but also it helps their understanding of safety measures and thus their greater adherence.

Lastly, we observed that the naive causal explanations provided differ according to different individual, groupal, professional or organizational identities. This observation prompt to avoid programs and prevention messages too general to move towards strategies that take into account the beliefs, culture and specificities of each target population or organization. In other words, it is advisable to design programs and targeted messages of prevention and to take into account the socio-cognitive functioning and culture of the targeted people and organizations. Of course this «tailored» approach is highly time consuming and expensive but it seems more effective than general or «ready-to-wear» (readymade) measures that sometimes leave many people indifferent.

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ITALY

THE EVALUATION OF PSYCHOSOCIAL RISKS IN THE WORKPLACE: THE CASE OF ITALY

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Summary

1. Psychosocial risk factors, stress and Italian law.

In Italy, the 2004 Framework agreement on work-related stress[1] raised the importance of understanding work-related stress on the part of employers and workers, providing an initial model to detect, prevent and manage problems that come with it.

This agreement represented a step forward for Italian law, which then developed the Consolidated Law on Safety at Work (Legislative Decree 9April 2008 no. 81, which has subsequently undergone changes and additions), considering work-related stress risks and the risks related to workers safety and health. Legislative Decree no. 81/2008 forces companies to carry out the assessment of work-related stress.

The legislation included in Decree no. 81/2008, which evaluates all risks interrelated with work stress in Italy, has been an important breakthrough. Until 2008, although the previous law required companies to evaluate psychosocial risk factors in the workplace, most were unable to accomplish this. Before 2008, work-related stress was one out of the many health and safety risks at work: a great emphasis was made in official documents and public statements, while minor attention was paid to daily practices of prevention, monitoring, and management of psychosocial risks. As an outcome of the transposition in 2008 of the 2004 European Framework agreement on work-related *stress*, a more compelling and detailed obligation to detect, prevent and manage psychosocial risk factors has been introduced. Such a change, full of potentially heavy legal responsibilities for employers, produced a triple effect.

One effect was an increased demand for valid, reliable but at the same time practical and «light» (i.e. not too costly or too invasive with organizational and production processes) procedures and practices for the assessment of psychosocial risks.

A second major effect was increased attention from unions and entrepreneurs towards work-related stress. Of particular interest was its definition, the possibility to make «objective» assessments of its consequences, and the need for clear guidelines to be fixed by norms and rules, so that every employer could feel reasonably protected from accusations of negligence in assessment, prevention, and management of psychosocial risks. The smaller the scientific and professional agreement about what risks are and how to measure them and their consequences (as is the case for stress), the greater the worry for entrepreneurs about being accused of negligence, and so the greater

1 Vid. http://ec.europa.eu/social/main.jsp?catId=329&langId=en

the need for clear guidelines (although flexible enough to take into account the nature of Italian enterprises, where more than 90% have less than 10 employees).

The third major effect was the effort to build a national system, involving national agencies for health and safety at work, research institutions, and representatives of unions and employers, to adopt a shared vision, and a shared methodology, using international benchmarks. After an initial period when a number of tools, questionnaires, and practical suggestions were produced and put on the market (though somewhat independently by public and private entities), primary attention to the underlying method (HSE was chosen as the benchmark) was considered more important than what operational tools for measurement were chosen.

Finally, on the basis of this law and the provisions of the 2004 Framework agreement on work-related stress, the Consultative Commission of the Ministry of Employment, in November 2010 issued an interpretative norm («Circolare Ministeriale»[2], henceforth CM) endorsing methodological guidance to assess work-related stress in organizations, for employers, their advisers and supervisory bodies. This document represented another important breakthrough in psychosocial risks factor and stress evaluation in Italy, not only in the research arena but also in its practical implications. The CM has, in fact, defined the minimum methodological approach for the implementation of compulsory assessment of work-related stress in organizations, both public and private.

The Consultative Commission has specified that the assessment of risks from work-related stress must be made by the employer with the person in charge of protection and prevention (RSPP: «Responsabile Servizio Prevenzione e Protezione», Responsible for Prevention & Protection»), the involvement of the so-called «competent physician» (if any: a physician dedicated to the company), and after consulting the workers' representative in charge of safety (RLS: «Rappresentante dei lavoratori per la Sicurezza»).

First, the risk factors must be identified, so that the organization can plan and implement measures to eliminate or reduce them. This path must take into account all workers and should consider homogeneous groups regarding organizational tasks or partitions, and not the single worker.

The methodology set out in the CM consists of two parts, one mandatory (preliminary assessment) and a second that has to be conducted only in the event that the corrective actions put in place in the previous step have proven ineffective.

2 Circolare Ministeriale no. 0023692, 18.11.2010

The preliminary assessment focuses on the collection of «objective» and «verifiable» indicators (if possible, quantitative) from at least three groups:

1) **Sentinel event**s, such as injury rates, sick leave, turnover, procedures and sanctions, reports of a competent doctor, specifications and formalized frequent complaints by workers. The evaluation of these elements must take into account the homogeneous parameters identified by the organization (e.g. time courses of injury rates);
2) **Factors related to job content**, such as working environment and equipment, loads and pace of work, working hours and shifts, and correspondence between workers' skills and job requirements;
3) **Factors related to work context**, such as role in the organization, decision-making autonomy and control, interpersonal conflicts at work, evolution and career development, and communication (for example, uncertainty of expected performance).

The use of checklists is expected in the preliminary phase for an objective and overall assessment, and if possible parametric, of the three types of factors listed above.

To better understand and evaluate the factors through the content and context of the work, it is necessary to directly consult workers or RLS. If the organization is large, it can be seen as a group of workers representing the workforce, and the mode is determined by the employer in relation to the assessment methodology adopted.

If this preliminary phase does not reveal significant work-related stress risk factors, the employer must return the results in the final and official Risk Assessment Document (DVR: «Documento di Valutazione dei Rischi») and plan a monitoring phase.

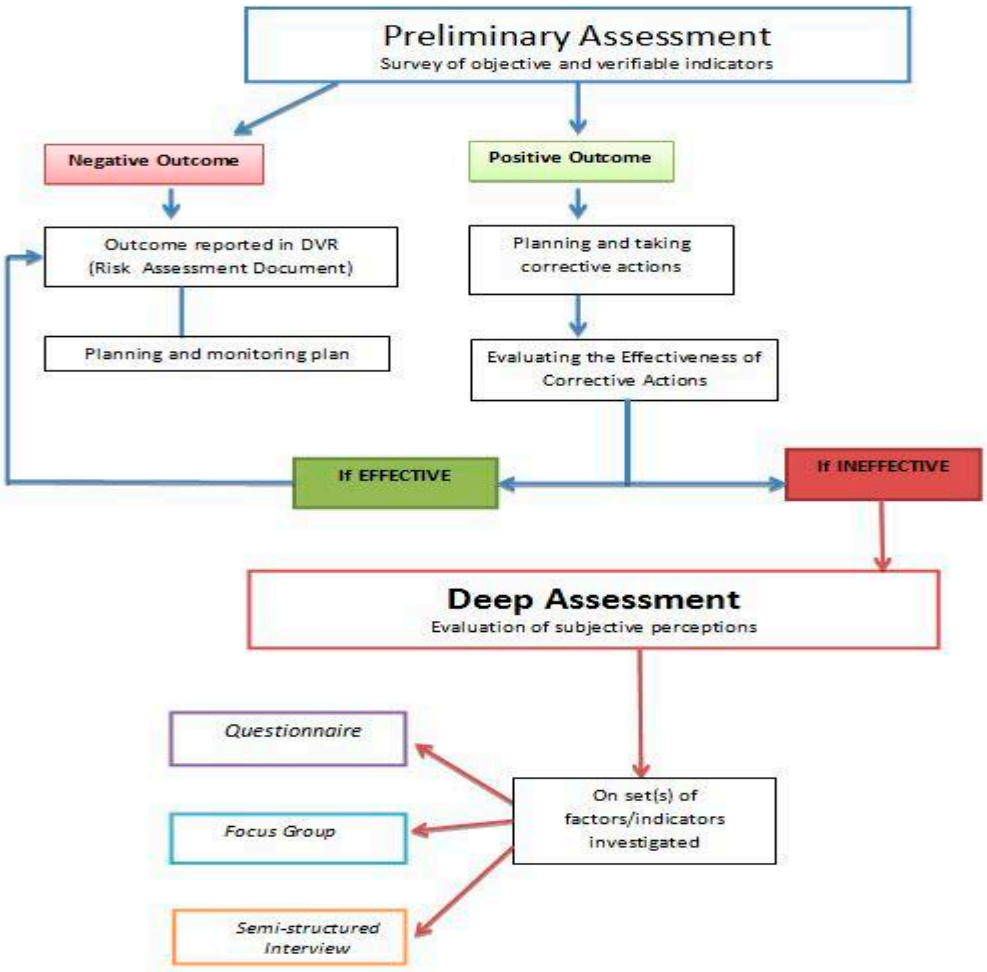
On the contrary, if the preliminary analysis detects elements of work-related stress risks, corrective actions (such as organizational, technical, procedural, communication, training, etc.) have to be put in place. If such actions are ineffective, the organization must proceed with the second phase, a «Deep Assessment».

The Deep Assessment phase is designed to collect workers' subjective perceptions of the risk factors listed above through questionnaires, focus groups, semi-structured interviews. This phase involves homogeneous groups of workers in which elements of risk have been detected in the previous phase. If the size of the company is a concern,

data collection can be performed on a representative sample of the workforce. Otherwise, if the company has less than 6 employees, the employer may use methods of evaluation that directly involve workers (such as meetings), both to search for solutions and to evaluate their effectiveness.

As will be seen in the next paragraph, the Legislative Decree no. 81/2008 and subsequently the CM of the Consultative Commission have laid the foundations for assessment and intervention methods in the field of work-related stress.

Fig. 1. The flowchart of the methodology for the assessment of work-related stress, according to the Consultative Commission (resumed and adapted from INAIL, 2011).



2. Methods and instruments.

2.1 The most used method in Italy: the INAIL method.

The assessment methodology for work-related stress most common in Italy was initially proposed by the National Institute for Occupational Safety and Prevention (ISPESL). This model consists of a phased approach that aims to identify the organizational dimensions associated with risk factors from the scientific literature. ISPESL has referred to the Management Standards Model developed by the HSE - Health and Safety Executive (http://www.hse.gov.uk/stress/standards/) to help reduce the levels of work-related stress in organizations.

Thanks to Law no. 122 of 30 July 30 2010, ISPESL integrates with the National Institute for Insurance against Accidents at Work (INAIL), giving rise to the «Health and Safety Unit.» In November of the same year, the Consultative Commission approves a few instructions to assess the work-related stress in organizations.

On the basis of the methodology proposed in the CM, INAIL drew up a work-related stress assessment procedure that comes from research begun in the ISPESL' Department of Occupational Medicine and ended in the same INAIL. The aim was to test and validate the theoretical model of the six Management Standards, adapting the tools and the procedure to the Italian context through a sample of about 6,300 workers.

The INAIL (2011) assessment procedure of work-related stress provides an initial Preparatory Phase in three steps, which is useful to prepare the organization for the process:

1) Establishment of the Assessment Management Group, attended by the executives selected by the employer, RLS, RSPP, and competent psysician. The goal is to plan, manage, promote and supervise the assessment process in the organization, to approve action plans, and to develop management reports;
2) Development of a communication and staff involvement strategy, by sharing information with all employees (including managers and supervisors) and training for activities that they had to do to deal with the factors of work's content and context;
3) Development of the plan for risk assessment, including a time schedule.

This phase is followed by the Preliminary Assessment, to facilitate the Assessment Management Group's work through an instrument («checklist») which contains the indicators derived from three groups outlined above: 1) sentinel events, potentially critical (accident, sickness absence, turnover, procedures and sanctions, the competent doctor reports, formal complaints of workers); 2) work content factors (work environment and equipment, workloads and pace of work, working hours and shifts, correspondence between skills and expectations); and 3) work context factors (role, decision-making autonomy and control, interpersonal conflicts, possibility of career development, communication). In this phase there is a check of which parameters are already monitored by the organization (for example, training, paid leave, etc.) and the form in which these are registered (hours, days, percentage of the total, etc.). As an example, a sample checklist relative to sentinel events and an example relative to the topic working hours in work content factors have been inserted in Figures 2 and 3. The examples are reported to show two different ways of scoring.

Fig. 2. Example of Items in the Checklist (Sentinel events; trend refers to the last three years) (INAIL, 2011)

N.	INDICATORS	DECREASED	UNCHANGED	INCREASED	SCORE	NOTE
1	Accident Incidence Rates	0	1	4		
2	Sickness absence	0	1	4		
3	…					

Fig. 3. Example of Items in the Checklist (Work content factors: Working hours) (INAIL, 2011)

WORKING HOURS					
N.	INDICATORS	YES	NO	FINAL SCORE	NOTE
29	Working hours longer than 8 hours are regularly present.	1	0		
30	Overtime is usual.	1	0		
31	Rigid (not flexible) work hours are present.	1	0		
32	The work hours timetable changes frequently.	1	0		
33	Work breaks are clearly defined.	0	1		
34	Shifts are present	1	0		
35	Night shifts are common.	1	0		
36	Fixed or rotation night shifts are present.	1	0		
TOTAL SCORE					

For each homogeneous group or organizational unit, the Assessment Management Group will fill out their «checklists». For each indicator, the score is then turned into a percentage, which will identify the level of work-related stress risk in the organization:

- **≤ 25% = LOW RISK:** from the indicators analysis do not emerge organizational conditions that can determine the presence of work-related stress**;**
- **25% o ≤ 50% = MEDIUM RISK:** there are organizational conditions that can determine the presence of work-related stress. There is the need of corrective actions and then an assessment of their effectiveness. If these actions are not effective the Deep Assessment Phase must be carried out;
- **50% = HIGH RISK:** there is a high risk of work-related stress in the organization, that requires immediate corrective action. If they are not effective, the Deep Assessment Phase must be carried out.

In Italy, the checklist proposed by INAIL for the Preliminary Assessment Phase is the most used tool in companies. As we will discuss later, only the first phase («Preliminary Assessment») process has seen wide application.

For large organizations, the involvement of a representative sample of workers is considered appropriate. In contrast to the assessment of other risks, the involvement of employees (although in the Preliminary Assessment Phase it may be limited to a consultation with the RLS) is crucial for work-related stress risk.

If the organization overcomes a risky situation due to corrective actions, the results are recorded in the Risk Assessment Document (DVR) and the organization can proceed with the Monitoring Phase. If the interventions prove not effective, the next phase (Deep Assessment) becomes mandatory.

The Deep Assessment phase determines workers' subjective perceptions through various instruments such as questionnaires, focus groups, and semi-structured interviews.

INAIL uses the Indicator Tool, made available to companies through user-friendly software, downloadable from the Institute's website. The Indicator Tool is a questionnaire consisting of 35 items covering the six organizational dimensions of the Management Standards Model, namely: a) Job Demands, b) Control, c) Support (both from colleagues and from superiors), d) Relations, e) Role, and f) Change. Toderi, Balducci, Edwards, Sarchielli, Broccoli, and Mancini (2012) have recently validated the Indicator Tool questionnaire in Italian, with a sample of 1,298 Italian employees of private-sector organizations.

The software by INAIL, in line with the original proposal, offers an interpretation of the results for different homogeneous groups, which is characterized by a colour code:

- **Green**: very good level of performance, and the organization needs only to maintain (highest 20% of reference values, equal to the 80th percentile);
- **Blue**: good level of performance, and the organization must not lose quality of performance (equal to or higher than average, but below the 80th percentile)
- **Yellow**: low level of performance, need for corrective action (levels below the average but above the 20th percentile)
- **Red**: very low level of performance, need for immediate corrective actions (levels below the 20th percentile, lowest 20% of reference values).

Corrective actions can then be targeted at the organizational elements that constitute the most critical areas (red and yellow).The monitoring phase of the organizational process follows, which can be performed with the re-use of the Indicator Tool and subsequent analysis.

The methodology proposed by INAIL, unlike the ISPSEL, has introduced a mandatory Preliminary Assessment Phase of work-related stress as provided by the CM, and is the minimal path for each organization.

2.2 Tools available for subjective assessment.

In Italy, the Deep Assessment phase, with the aim of investigating the subjective perceptions of workers about the risk factors outlined above, mostly relies on self-report questionnaires as tools most easy to find and use, and able to save time and cost.

Among the most commonly used questionnaires in Italy, (Deitinger et al., 2009) we can mention: Job Content Questionnaire (JCQ, Karasek, 1979), Effort Reward Imbalance (ERI, Siegrist, 1996), Well Being Organizational Questionnaire (Q-Bo, De Carlo, Falco, & Capozza, 2008), Occupational Stress Indicator – Italian Version (OSI, Sirigatti & Stefanile, 2002), Multidimensional Health Organization Questionnaire (MOHQ, Avallone & Paplomatas, 2005), Organizational and Psychosocial Risk Assessment (OPRA; Magnani, Mancini, & Majer, 2009).

A part of these instruments are Italian validations and adaptations of tools already well validated in an international context. Here are some of the most common developed tools in Italy following the regulatory requirements of 2008:

- Q-Bo - Questionario Benessere Organizzativo (De Carlo, Falco, & Capozza, 2008);
- OPRA - Organizational and Psychosocial Risk Assessment (Magnani, Mancini, & Majer, 2009);
- MOHQ - Multidimensional Health Organization Questionnaire (Avallone & Paplomatas, 2005).

The «**Q-Bo**» stands for «Questionario Benessere organizzativo» (Well Being Organizational Questionnaire), developed and validated by the research unit of work psychology at the University of Padova. It assesses work-related stress in the perspective of organizational well-being: in addition to assessing the risk factors according to the indications of the Consultative Commission, it is a tool that also focuses on improving the efficiency and effectiveness of the enterprise. The Q-Bo has been tested on 25,000 employees and is suitable for various organizational contexts, both public and private, within various productive sectors and companies of all sizes. This is a multi-modular questionnaire and includes 200 items to which the employee must respond according to a Likert scale. The total filling time is about an hour; the test is strictly anonymous and the data obtained are analysed in the aggregate.

The items refer to a theoretical-application model that is divided into three main areas: sources of stress, personal resources, and consequences/effects. The stress' sources investigate: organizational culture, climate, conflict (of various types), workload, safety/environment, perception of support, and collective efficacy. The personal resources explore resilience, self-efficacy, negative affectivity, optimism, and over-commitment. Finally, the consequences/effects section explores the key issues of physiological, psychological, and behavioural strain; as well as bullying/straining, intentions of turnover/absenteeism, compliance/altruism and commitment, and finally general satisfaction.

The questionnaire consists of five levels of data analysis and interpretation:

1) **First level**: getting to know the organization by identifying its strengths and weaknesses. All dimensions are compared with each other. The comparison is based on the relative value of the results of all dimensions, in relation to the general average of the values of the organization;
2) **Second level**: the absolute values of each dimension are compared with those of a comparison sample, i.e. standardization;
3) **Third level**: deepening the influence of the socio-demographic variables in the assessment of psychosocial risks and their consequences;

4) **Fourth level**: to understand where to act in terms of improving organizational well-being and of reducing work-related stress risk, this level assess the relationship between psychosocial risks and their consequences on individuals;
5) **Fifth level**: with benchmarking data, a model is developed that defines the overall level of risk within the organization.

Based on the results obtained, the paths of intervention and corrective actions can be configured.

The «**OPRA**» stands for «Organizational Psychosocial Risks Assessment», and is a multifactorial questionnaire that assesses psychosocial risk factors and work-related stress. It was released in 2009, in response to Decree no. 81/2008 and it has been designed, constructed, and validated in Italy by Magnani, Mancini, and Majer (2009) at the University of Florence. The instrument adapts to all types of organizations, both public and private, and consists of 86 items; administration of the test to both individuals and groups takes about 20-25 minutes.

The tool's factors are central to the definition of work wellbeing and the optimal state of mental and physical health, in line with the scientific literature. Qualitative and quantitative testing of the questionnaire have confirmed its psychometric properties.

The structure of the questionnaire is divided into three parts:

1) **Index of standardized risk**: this axis is composed of five indicators that explore the discomfort resulting from a lack of identification with the group or organization, a low level of job satisfaction, a lack of confidence in the organization, or intention to leave the workplace. Each of these variables has a different weight and together determine a risk index, which may be negligible, medium-low, medium-high, high, or critical. The higher the risk index, the less participants have the resources to cope with the demands of their work environment. A graphical dashboard of the risk assessment is then is constructed with the results obtained from individuals.
2) **Inventory risk sources**: this part is composed of 65 items (nine factors) that investigate the sources of pressure at work that may cause distress or uncomfortable working conditions. In particular, interpersonal relationships, work schedules, workloads, the role, the environment/safety, the home/work interface, autonomy, career development and culture/organization are investigated. This is the key to setting corrective actions to reduce the risk of work-related stress.

3) **Mental and physical health**: a two-dimensional scale of 16 items explores the presence and frequency of physical and psychological disorders. At the end, an aggregate index estimates the effects of stressful conditions of the work.

On the answer sheet is then added a detailed socio-professional card to compare the different professional categories and identify the conditions of higher risk and/or occupational stress. In addition, the OPRA also has a tab for the detection of corporate data to assist the risk sources identification for work-related stress.

The «**MOHQ**» stands for «Questionnaire Multidimensional Health Organization» and it has been designed by a research group of work psychologists in Rome and experts from organizations of certain public administrations. The questionnaire is based on the organizational health model (Avallone & Paplomatas, 2005) and is divided into eight parts, each with an item on a 4-point Likert scale. The questionnaire is divided into 14 dimensions, whose indicators investigate concepts of organizational health: comfort, objectives, values, listening, information, conflict, reports, operation, social utility, safety, work tasks, and finally innovation propensity.

Besides the Organizational health dimensions, the questionnaire also reveals:

a) *Negative indicators* that dig in the experiences perception of lack of affection in the organizational context. This is 13 indicators, including for example: intolerance, lack of interest, desire to change organization, confusion of tasks and roles, absence of proactivity.
b) *Positive indicators*. In contrast to the negative ones, these twelve indicators refer to the feeling perception of affection in the work environment (for example: satisfaction, membership, the desire to go to work, achievement, feeling of the future, trust in the leadership, and human skills).
c) *Indicators of mental and physical illness*. These refer to the area of psychosomatic disorders, for a total of nine indicators.

This instrument has been developed from a wide experiment started in 2004 within a project called «Improvement of Organizational Wellbeing in Public Administration», which involved more than 34,000 workers of the Public Administration. For this reason its use is recommended in the environment of Public Administration more so than in other contexts. An adapted health care context version also exists.

2.3 Beyond subjective assessment.

The instrument presented highlights how in Italy stress assessment tools are derived from the use of subjective or research tools (Tabanelli et al., 2008) built on theoretical models (Karasek, 1979; Siegrist, 1996), and mainly based on workers' perceptions of their working conditions (Leitner, Resch, 2005).

Investigating psychosocial risk factors by means of subjective tools only, measurement bias will likely result from the personal interpretations of risk factors (Semmer et al., 1999). Indeed, responses may be distorted by response styles, the attribution process, personality characteristics, or affective states (Kompier, 2005). Meanwhile, another drawback is related to the measurement of psychosocial variables and their outcomes, which can lead to common method variance (Lindell & Whitney, 2001).

So, considering the limitations of the subjective assessment of risk factors for work-related stress, in Italy other methods of investigation have been drawn up, in accordance with the Legislative Decree no. 81/2008 and the dictates of the CM. During the «Deep Evaluation» phase, the subjective evaluation of workers is not only limited to evaluation but goes further than the sole use of questionnaires previously described. In the next section, the Objective Stress Factor Analysis (OSFA) and Stress Assessment and Research Toolkit (START) methods will be introduced.

The method OSFA (Argentero & Candura, 2009; Argentero, 2011) focuses on the analysis of objective elements, which are extracted and evaluated with a standardized procedure. This method is therefore in effect an objective investigation of risk factors of work-related stress, integrating statistical indicators and corporate study of the conditions of work with a panel of business experts. The procedure is divided into two phases.

The first phase seeks to elicit the main sources of stress in the organization and in turn is divided into two sub-phases:

1) The management company provides corporate data from the last three years to see if there are potential risk factors for work-related stress (10 indicators), physical problems that emerged from the working conditions of employees (noise, vibration, odour, etc.) and any pathological situations of stress highlighted by the doctor;
2) Risk situations in the organization are analysed, investigating four areas:

a) *organizational aspects of work*: factors that derive from the asset and the planning of the work (shifts, workload, travel, schedules, etc.)
b) *social aspects*: quantity and quality of interpersonal relationships in the organization (support, confidence, etc.);
c) *aspects related to safety*: ergonomic factors of job design (environmental hygiene, use of equipment, etc.);
d) *management aspects*: organizational structure and mode of operation (procedures, recognition, stability of employment, etc.).

This first assessment phase uses a structured interview containing 72 items to be conducted with the company's managers and experienced workers, thanks to the use of a checklist. In the event that significant levels of work-related stress emerge from the analysis in this first phase, this method proceeds with the second phase of assessment, which instead uses subjective methods such as self-report questionnaires, tests or focus groups with workers or a representative sample of staff.

The OSFA method has several advantages, including the involvement of a limited number of persons, or business experts (especially in the first phase), which have different roles in the organization. It also has the advantage in terms of time required, where the process ends in a short time if the first phase does not reveal criticalities. This method also provides complete and quality information, with accurate data through comparison with different sources and triangulation between statistical indicators and those obtained from analysis of the work.

The START method (Guglielmi et al., 2013; Panari , Guglielmi, Ricci, Tabanelli, & Violante, 2012) raises three main methodological issues related to stress evaluation. First of all, the lack of a clear threshold that allows to distinguish who is stressed and who is not. The second is the necessity to use both subjective and objective measurements, and lastly the use both of qualitative and quantitative data. To overcome these issues, this method is composed of four different instruments that collect four different kind of data using mixed methods research: a) organizational indicators sheet (quantitative and objective organizational archival data); b) focus group (qualitative and subjective data); c) questionnaire (quantitative and subjective data); and to some context also d) observational checklist (qualitative and quantitative objective data). The integration of these sources of data can reduce the theoretical and methodological bias related to stress research in the work setting, allows researchers and professionals to obtain a reliable description of workers' stress, and provide a more articulate vision of psychosocial risks. In addition, it

allows positive and negative aspects of work to be considered together, using an approach that considers at the same time job demands and job resources. Finally, the implementation of this method ensures in the long term a primary prevention for psychosocial risk management, in that it aims to reduce or modify the intensity, frequency, or duration of organizational demands.

3. Where is psychosocial risk factors research heading in Italy?

A part of the psychosocial risk factors research is focused on validation tools as illustrated above. At the same time, an area of research has remained active on psychosocial risks factors, work stress and their outcomes. For example Fida, Gualandri, and Avallone (2011) examined the psychosocial risk factors of several types of Italian Public Administration offices using the Multidimensional Organizational Health Questionnaire (MOHQ) as a measure. The results indicated that perceptions of fairness and job demands were the most problematic risk factors, and in general revealed a high perception of stress in the workers studied.

In a private company setting, Quaglino et al. (2010), presented the results of the «Well-being in Telecom Italia Call Centres» project. The research investigated the complex dynamics of well being from different perspectives (psychological, physical, organizational, etc.), throughout a research design combining qualitative (interviews, observations, focus-groups) and quantitative methods (questionnaires, physiological response to perceived stress). The results underlined important differences between well-being indicators, according to the different kinds of call centre, the respondents' gender, and working hours, and led to a re-definition of the work environment in the centres.

Other studies, however, concentrated on the confirmation and the improvement of work stress models well validated in the international panorama. For example, Panari, Guglielmi, Simbula, and Depolo, (2010) extended the stress-buffering hypothesis of the demand-control model. It confirms the role of an opportunity for learning and development in the workplace as a moderator variable between increased demands and need for recovery. The results show that organisations that encourage personal learning by workers at the same time modify themselves, so that they become better able to adapt to changes and external demands.

In this area of stress research, we often find research in the health context, with particular attention to burnout, and studies relative to mobbing and its antecedents

An area relative to stress *versus* wellbeing in a health environment can be traced. For example, Fiabane, Giorgi, Musian, Sguazzin, and Argentero (2012) confirmed that occupational stress and job dissatisfaction are recognized risk factors for healthcare staff. Their results show that the main sources of stress were unfairness, conflict between personal and organizational values, lack of reward, and workload. Practical implications include the importance of focusing on the psychosocial factors in the work environment and job satisfaction in order to improve the well-being of healthcare professionals. Cortese, Colombo, and Ghislieri (2010) however, concentrated more on psychosocial risks as antecedents of job satisfaction. Their results showed the relationship between work-family conflict (WFC) and job satisfaction, and the importance of some WFC predictors (supportive management, emotional charge and job demand) for their connections with job satisfaction. Guglielmi, Simbula, Depolo, and Violante (2011), also regarding the healthcare context, used the Job Demands Resources (JDR) Model, considering job demands as psychosocial risk factors and job resources as protective factors. Their results confirm energetic and motivational process underlying the JDR model and. suggest a use of it for the comprehension and management of the risk factors (demands) but also as protection (resources), supporting the idea that a healthy work situation can not only be developed with the absence of negative factors but can also be obtained by encouraging positive characteristics.

Regarding psychosocial risks and mobbing factors, Balducci, Fraccaroli, and Schaufeli (2011) showed a model in which work environmental and personality factors were considered operate as antecedents of bullying and post-traumatic stress symptoms as an outcome. The results confirmed that job demands (workload and role conflict) and job resources (decision authority, co-worker support and salary/promotion prospects) were associated to bullying over and above neuroticism, and that bullying mediated the relationship between job demands and post-traumatic stress symptoms. Overall results are in line with a view of bullying as a strain process that involves both work environmental and personality factors.

The same authors also investigated the relationship between exposure to mobbing and stress-related psychophysical conditions (Baducci & Fraccaroli, 2013), taking into consideration the possible concomitant exposure to job strain and effort-reward imbalance. The results show that exposure to mobbing was significantly associated with psychological well-being and health constraints. Therefore the relationship between mobbing at work and health outcomes is not confounded by concomitant exposure to job strain and effort-reward imbalance and these results confirmed the role of mobbing as a psychosocial risk factor.

Giorgi (2010) also dealt with mobbing and the psychosocial environment of work. The results showed that workplace bullying has an indirect relationship with health throughout organizational climate and suggested that bullying at work can also be considered a cause rather than a consequence of organizational climate.
Finally, in the panorama of research at a national level, it should be noted that «Psychosocial Risk Management—European Framework» (PRIMA-EF), took part in the project aimed at creating a European model to manage psychosocial risks. The project has been realized by a consortium of national European agencies (ISPESL for Italy), and coordinated by The Institute of Work and Health Organization-University of Nottingham (I-WHO). It has been achieved with the help of The World Health Organisation (WHO) and the International Labour Organization (ILO),. The project not only clarifies best practice principles, standards, and actions; but supplies an indicator model for monitoring and an integrative framework that can be used for the EU overall and across member states. It has underlined the need to assume a global and systematic position in the analysis of risks in order to increase the use of this approach to risk management, developed in the best way to deal also with psychosocial risks (Leka & Cox, 2008; Deitinger et al., 2009).

5. Peaks and valleys in the next future.

In conclusion, some points emerge and should be considered, if one looks at the future of research and intervention on work-related stress in Italy.

First, a public interest in the prevention of work-related stress has been officially stated and translated into concrete behaviours: through Decree no. 81/2008, a truly radical change has been created in the attention paid to psychosocial risks at work by entrepreneurs, workers, and their representatives.

Second, the obligations that Decree no. 81/2008 imposed on entrepreneurs (to make a valid, reliable and data-based assessment of psychosocial risks) acted as a stimulating challenge for applied researchers in the field, since a new market was opened, searching for scales and questionnaires to be used in data collection.

Both events – the obligations enforced by the new law, and the request for new (applied) research tools – are actually twofold, in the sense that they gave advantages and disadvantages. Aside from the advantages listed below, the darker side of the moon consisted mainly in a formalized and routinized way that a large part of the enterprises

adopted to respond to the obligations imposed by law. Without a strong tradition of diagnosis and prevention of work-related stress, the major concern for many small and medium-size enterprises seemed «to be in line with the law», as if the main task were to fill out a complete DVR. This is not the case for other enterprises, where the top management decided to take the opportunity of the new law, to improve the relationships between HRM system and safety. More than in other risks (mechanical, chemical, and so on), prevention of psychosocial risks at work entails a re-examination of organizational practices and policies, so that not only adjustments at single job level are needed.

The public agencies in charge of institutional monitoring and surveillance are also helping the Italian productive system, having developed (and still improving) a set of guidelines for control and inspection activities, aiming to stimulate an improvement of procedures and an increased attention to participated ways of diagnosis and intervention, involving workers and their representatives. This is very important, since it could encourage the enterprises towards a true management model of safety, in the field of work-related stress.

Last but not least, the increasing amount of research and of data collected may help basic and applied research in the field. For instance, a valid and reliable national database would be a strong help for benchmarking evaluations. At the same time, the obligation for enterprises of continuous surveillance on psychosocial risks seems able to foster longitudinal research, that would be very useful to test on the field both methods (i.e. mix-methods approach, qualitative and quantitative, as well as self-report and observational measures), and conceptual models on work-related stress.

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PORTUGAL

WELL-BEING IS POSSIBLE IN THE WORK PLACE: THE POTENTIAL OF UNIVERSITY-COMPANIES PARTNERSHIP FOR INTERVENTIONS

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Summary

Abstract.

It is crucial for organizations to work towards promoting employees' well-being, not just because it is the right thing to do for the individual, but also because there is increased awareness of the benefits it brings to the organization. Research has demonstrated that the healthy worker is the best worker and the business that promotes this new sense of health is a good business.

In this chapter we focus on the interventions carried out by our team at the Faculty of Psychology, University of Lisbon. First, we show that we adopt a comprehensive perspective of workers' well-being, to understand the mechanisms that enable both the inversion of negative effects and the promotion of positive effects. Secondly, since a large body of research lays out a diverse set of organization conditions that influence workers' well-being, we explain our emphasis on the diagnosis phase where we focus on the analysis of specific context characteristics. We reflect on the difficulty in defining organization characteristics that influence workers' well-being *a priori* and highlight the need for a customized intervention that is geared towards the specific reality of each organizational context. Thirdly, we write about different examples of our intervention: in an elite organization of firefighters we verified that social support had an important role in the stress management of these professionals and we developed an intervention that consisted of a leadership stress management workshop for middle supervisors which revealed, as predicted, an increase in colleagues' social support, and a marginal increase in their vigor; in soldiers on a peacekeeping mission we verified that a breach in psychological contract had an effect on soldiers' well-being throughout and at the end of the mission, thus we recommended a change in the selection process of these soldiers, namely the introduction of information to clarify the mutual obligations between the army and the soldiers participating in a peacekeeping mission; in a bank we verified that not only work characteristics –demands, control, social support – but also work-family enrichment were important to workers' well-being, thus we recommended the introduction of different human resource management practices that could promote such enrichment.

We concluded the chapter by reflecting on the potential of university-companies partnership as targets for interventions designed to promote workers' well-being.

1. Introduction.

Well-being in the workplace is not easily definable since a number of different conceptions have been attributed to this concept and, consequently, different ways of prescribing precaution methods and intervention. The International Labour Organization (ILO, 2009) developed a comprehensive conception, which regards the understanding of workers' well-being to involve an analysis of how the latter feel in the context of the workplace – safe, healthy, satisfied and engaged - and consider that these feelings are related to different context conditions and are a determinant factor for organizational efficacy, since there is a direct connection between the levels of workers' well-being and their productivity.

The pillars of our intervention at the Faculty of Psychology of University of Lisbon within the scope of psychosocial risk prevention and promotion of quality of life at work are based on this conception. First of all, we considered that we need a complex understanding of well-being, which includes the analysis of the presence-absence of the positive (eustress, i.e. Hope, Meaningfulness, Positive affect, Engagement) as well as the presence-absence of the negative (distress, i.e. Anger/hostility, Frustration, Negative affect, Burnout, Anxiety) (Nelson & Simmons, 2003). In fact all of our prevention / intervention actions cover ill health, ill-being and poor functioning, but also positive health, well-being and optimal functioning (Schaufeli & Salanova, 2007). Despite the fact that most of the research on health and well-being in the workplace focuses on the negative impact of working conditions, more recently, a number of studies have shown that not everyone experiences the negative effects of work demands and, moreover, shed light on the fact that these same demands may have a positive effect on workers' health and well-being. Indeed, some of theses studies have shown that the same professional context factors can trigger both negative and positive responses and the responses themselves (whether negative or positive) will impact workers' health and well-being (Chambel & Peiró, 2011; Nelson & Simmons, 2003).

Secondly, the management of well-being in the workplace has been regarded as a joint responsibility of the workers and the organization where they are employed, and may function on three levels: by changing the causes that promote or hinder well-being in the workplace; managing individual responses to such causes; treating the symptoms resulting from these situations in which the worker's well-being is compromised (Quick, Quick, Nelson, & Hurrell, 1997). However, in our view, the organizational factors take on a greater weight in explaining workers' well-being (Bakker, Van Emmerik, & Euwema, 2006) and a three-fold analysis on these factors has been carried out: macro-structural, meso-structural and micro-structural (Nelson & Simmons, 2003). On a macro-structural level, we

consider, for instance, organizational culture, namely the basic assumptions regarding human nature and workers' motivation, or that which makes them work efficiently. The management policies and practices of human resources implemented by the organization are also taken into account, along with the positive and/or negative attributions made by the workers in relation to the motives behind the implementation of these practices. On a meso-structural level, we consider the interpersonal relations the workers establish within the organization in which they are employed, namely the established psychological contract, the relationship with the leader and the functioning of the task force. On a micro-structural level, we take the positive or negative evaluations the workers make of their working conditions into consideration (e.g. job characteristics and employment insecurity).

Stemming from our conception, it is also worth noting that in all our interventions, we believe that each organizational context should be regarded unique, obliging us to consider that each has its own specific factors related to occupational well- being (Bakker & Demerouti, 2007). Thus, we always start out by creating a partnership with the organizations in which we will intervene, and this relationship may take on a number of forms: merely developing a diagnosis of workers' well-being levels and of the variables of the context which requires intervention so as to reduce their distress and/or increase their eustress; not only accomplishing such diagnoses, but also developing the respective actions, so as to intervene in the context factors deemed indispensable for the improvement of workers' well-being. We will now go on to present some examples of our interventions.

2. An intervention with firefighters.

Within the scope of an agreement established with the Portuguese National Civil Protection Authority, we were asked to offer support in reducing the strain experienced by the firefighters who were members of small teams, composed of 4-6 professionals, and transported by helicopter to fires in their early stages. Afterwards, these teams were left alone in the operation theaters until the arrival of reinforcement, which came by terrestrial means (Ângelo & Chambel, 2013). In order to design this intervention, we first had to take into account some data in the literature, namely the fact that the firefighter profession is considered to be an occupation with high adverse conditions and characterized by high strain, the latter having a negative impact on their well-being. Indeed, these professionals have acute demands that hinder their responsiveness and lead to strong emotional reactions, for example, they have to intervene in potentially traumatic incidents that can involve patient death, often combined with poignancy (Halpern, Gurevich, Schwartz, & Brazeau, 2009). Nevertheless, these stressful demands are inherent to this profession, and,

therefore, it is not possible to intervene in such a way as to reduce the core factors that create such occupational stress, but it might be possible to develop resources and mitigate the negative effects of high demands, ensuring the well-being of these professionals (Bakker & Demerouti, 2007). In fact, research has suggested that social support could serve to mitigate the negative psychological impact of firefighters' demands (Varvel et al., 2007) and empirical results have demonstrated that emergency professionals who reported supervisor support (Bacharach et al., 2008) and colleagues support (Løvseth & Aasland, 2010) tended to show less stress. However, emergency organizations often have strong negative attitudes toward the expression of emotions, which induce emergency professionals to feel concerns regarding social rejection, leading to a lack of willingness to utilize supervisor or coworker support (Lowery & Stokes, 2005; Thompson, Kirk & Brown, 2005). At a second point, a 10 day observation period was carried out at the headquarters of these firefighters, as well as focus-groups with supervisors and subordinates to acquire knowledge about this specific and idiosyncratic context, namely information about stressful and potentially traumatic events, normal reactions and the recovery process; the supervisor's support role; leadership techniques to promote social support among coworkers and to reduce the barriers for seeking help, such as isolation, stigma, and embarrassment.

Based on the diagnosis, the social support of colleagues was found to be one of the indispensable resources for helping these firefighters to handle the stressful situations of their professional life more effectively. The importance of supervisors receiving training on the techniques for unlocking this effect and enhancing the use of peer support among their subordinates became evident and, so, we conducted a three-day stress management workshop for supervisors. This 3-day training consisted of an educational part and an action part. During the training, the following topics were addressed: stress and its behavioral, physiological and psychological impact; the importance of occupational health in everyday scenarios and critical interventions; adaptive coping strategies and promoters of psychological well- being; strategies to manage the impact of critical and traumatic incidents – the role of supervisor and peer support; the leadership role in training teams operating in adverse environments. Later, participants formed mixed problem-solving teams to design and implement plans of action to manage stressful situations. These plans focused on how to provide support to a subordinate who was returning to work after experiencing a critical incident, and how to develop positive attitudes toward improving the work culture in terms of peer (colleagues) support in the prevention of psychosocial stress. As a means of evaluating the effects of this intervention, we conducted a quasi-experimental study using a pre- and post-test control-group design. Since the organization was divided into 7 territorial district units, we randomly allocated four districts to the intervention group and three districts to the control group. In the intervention group, the supervisor received the training and in order to evaluate the effects of the

supervisor's intervention his/her subordinates' perception about work characteristics (job demands and resources) and individual psychological well-being (burnout and engagement) were assessed. Thus, subordinates (N=67) whose supervisors participated in the workshop composed the intervention group whereas those (N= 37) whose supervisors did not take part in the workshop were put in the control group. The assessment took place through a questionnaire, the first time before the intervention and firefighters were informed about the study through their chain of command. Later, an intervention on firefighter supervisors took place at the National Firefighters School in April 2009, a period at which all the organization members were in training. Supervisors from the intervention group participated in an intensive 3-day workshop away from the workplace for which overnight stays were required, thus detaching them from the distractions of their daily environment. Group sizes at the workshop ranged from 10 to 11 participants. Four months after the training, a post-intervention questionnaire (time 2) was given in September 2009 to all subordinates, during the fire season, which was a period where the whole organization was exposed to many demands. During this period there were no more interventions or behavioral training for supervisors. Additionally, according to the National Elite Force, there were no significant differences between these groups in terms of chronic or acute demands. The control group firefighters were invited to receive the same training the following year.

As for the main findings, the results revealed a significantly positive intervention effect on colleagues' social support, a marginally significant intervention effect on chronic demands and on the vigor dimension of engagement, and a non significant effect on burnout. The effect on colleagues' social support was expected and is particularly important because the enhancement of resources during a condition with high demands is one of the most effective means for preventing strain (Westman et al., 2005). On the other hand, the main mission of these firefighters consists of an initial intervention in forest fires where a team of five members is transported by helicopter. Thus, colleagues' support is extremely important for coping with these situations as the supervisors remain at the bases or go by land afterwards. Another expected result was the effect on the vigor dimension that maintained its value between T1 and T2 in the intervention group. Since there is an increase in workload, working hours, physical demands, and number of days away from their families for the firefighters at T2, we believe it is already very positive that the vigor values did not decrease as was the case in the control group. This assumption meets Mancini and Bonanno's (2006) definition of resilience, as the ability to maintain relatively stable, healthy levels of psychological functioning, despite being faced with loss, hardship, or adversity. This effect is important for the general population, but particularly for emergency professionals whose mission involves working in adverse settings. A result that was not expected is related to the effect on demands (the control group decreased their perceptions between T1 and T2 and the intervention group maintained their perceptions), which seems to be contradictory to the aim of the intervention aim.

Perhaps these findings suggest that firefighters in the intervention group may be more aware of the stress sources they are subjected to by the influence of their supervisors. Finally, the effect on burnout was also unexpected. A possible explanation is related to the experimental design of the study, since Le Blanc, Hox, Schaufeli, Taris and Peeters (2007) stressed that an intervention programme geared towards showing significant intervention effects on burnout dimensions should have follow-up measurements across periods of time ranging from 6 months to 1 year. However, we decided to measure T2 after four months as it corresponds to the end of the fire season, which is characterized by a context of resource loss.

The practical implications of the programme were considerable, since it was the first intervention of this nature at this firefighters' elite force. So in conclusion, our empirical study suggests that a three-day stress management workshop for leaders may lead to a positive significant effect on their subordinates' colleagues' social support. This effect was maintained for at least four months and was illustrated through this support resilience during the summer fire season, contrary to what occurred in the control group. The intervention with supervisors and measurement of impact on their subordinates highlight the multiplier effect of organizational intervention. The significant intervention effect shown on colleagues' support shows that stress intervention programmes are a feasible and effective way of promoting psychological occupational health.

3. Diagnosis of soldiers on peacekeeping missions.

Within the scope of an agreement with the Army Center of Applied Psychology (CPAE) we were asked to perform an analysis of the development of well-being in Portuguese soldiers who had participated in two peacekeeping missions. We began by holding a meeting with two psychologists from the Center with vast experience in this context, and we were able to ascertain that one of the aspects they considered relevant to explain the well-being of such soldiers during the course of the missions was the fact that many of them had had unrealistic expectations about what they might be confronted with and about what the army could offer them during and at the end of the mission. This idea is in line with research on breach of psychological contract—the organization having failed to fulfill promised obligation(s) (Rousseau, 1995)—, a proven working condition bearing a broad range of correlations with workers' well-being. For example, after a breach the employee exhibits higher anxiety, depression, and hurt (Conway & Briner, 2002), higher emotional exhaustion (Gakovic &Tetrick, 2003) and more cynical attitudes toward the organization (Johnson & O'Leary-Kelly, 2003). Moreover, in a meta- analysis, Zhao, Wayne, Glibkowski, and Bravo (2007) showed

that the psychological contract breach was primarily conducive to affective reactions, which led to the development of less favorable attitudes and behavior. We may regard these affective reactions as being conveyed in an increase in burnout as well as in a decrease in worker engagement. Therefore, we decided (Chambel & Oliveira-Cruz, 2010) to evaluate the extent to which the breach of psychological contract could be used to explain the development of well-being on the part of the soldiers during the course of their mission. We simultaneously analyzed its effect on the soldiers' burnout and its effect on the soldiers' engagement. Employees develop a psychological contract with the organization, which depends on the individual's experience in his or her own work, based on overall experience in the organization. However, in the case of such soldiers on a peacekeeping mission, we believe that they develop a perception for mutual obligations between themselves and the army in relation to that mission. When they choose to participate in a mission, they accept the obligation to display certain attitudes and behavior towards it. Likewise, they know that the army also has a number of obligations towards them, the most basic of which is financial compensation. We may, indeed, consider that in this situation the soldiers develop the perception of a variety of obligations on the part of the army, such as, for example, the upkeep of their well-being or personal and professional development opportunities. One of the functions of the psychological contract is to make the work context more predictable and controllable (Rousseau, 1995). However, this fails when obligations associated with such contracts are not fulfilled, and this lack of predictability and control may be associated with experienced burnout (Gakovick & Tetrick, 2003). On the other hand, we may expect this non-compliance of the psychological contract to reduce job engagement. Indeed, engagement implying a high level of energy and involvement with work is dependent on the resources the individual obtains in the work context (Shaufeli & Salanova, 2007), namely, the resources which have a high potential in the promotion of intrinsic motivation and well-being at work (Salanova & Schaufeli, 2008). In turn, the relational and balanced promises included in the psychological contract are based on the assumption of an obligation to provide resources that will bring about such motivation. Relational obligations include the two dimensions of loyalty and stability, namely, being responsive to employee concerns and well-being and employment security. The balanced obligations include three dimensions: internal development, external development, and dynamic performance, namely, potential job opportunities outside and within the organization and the creation of more challenging goals. When there is non- compliance of these promises on the part of the organization, the individual considers him- or herself to be deprived of available job resources that stimulate personal development and work motivation and, consequently, reduces his or her engagement (Bakker & Demerouti, 2007). Our sample consisted of 387 soldiers from the two missions who answered our questionnaire at three points in time: T1, a week before departure for the mission; at a second point, T2, around 4 months into its course; and at a third point, T3, a week after returning to national territory. The soldiers participated voluntarily in this study and were informed by the

researcher that their individual answers would remain confidential. First, it was possible to confirm that a breach of psychological contract has a significant effect on the development of burnout during the mission. As expected, the soldiers involved in our study exhibited higher burnout during the mission when they believed that the army, in this situation, was not complying with its obligations. This breach of promise, made on the part of the army, increased their experience of stress, leading to an increase in burnout (Gakovick & Tetrick, 2003). However, contrary to initial expectations, perception of such breach at the end of the mission was not seen to have an influence on the burnout levels of these soldiers at the same time. This may have occurred, because on ending the mission the psychological contract with the army became based on overall experience and the unpredictability experienced in this specific context ceased to be central to explaining the burnout of these soldiers. At this stage, after the mission had ended, their burnout levels were more likely to have been influenced by their assessment of the army's compliance with its obligations than by compliance with the mission's obligations. Secondly, we confirmed that non-compliance of the psychological contract, by depriving individuals of the resources they viewed as having been established through a mutual agreement (Rousseau, 1995) that promoted self-fulfillment and intrinsic enjoyment, reduced job engagement (Salanova & Schaufeli, 2008). When the mission failed to comply with the obligations regarded by the soldiers as having been promised to them, namely, being responsive to employee concerns and well-being and employment security, the promotion of internal development, external development and dynamic performance, potential job opportunities outside and within the organization and the creation of more challenging goals, the motivation of the employees was affected and consequently, their engagement decreased. As expected, such an effect occurred both during and at the end of the mission. When soldiers considered the mission to have deprived them of previously promised resources that were crucial to their intrinsic motivation, their involvement was not restored just because the mission had ended. Participation in the mission was an opportunity to increase the benefits obtained in the army and whenever this failed to occur, the soldiers experienced disengagement, both during and at the end of the mission.

With this diagnosis, the army received information that may contribute to better programming and greater efficacy in terms of these peacekeeping missions. The fact that the soldiers developed more burnout and less engagement during the course of the mission and less engagement at the end, when they felt that at that particular point the mission was not complying with its obligations, shows how important it is that they develop a realistic view of the mission's aims and fewer perceptions of a breach of obligation. In the period before departure for the mission, the army should make realistic information available regarding its obligations, and during the course of the mission and at the end, effort should be made not only to comply with these obligations but also to make information available

that may justify possible difficulties in doing so. Indeed, the availability of plausible justifications is a strategy that reduces the feeling of violation towards a situation representing a breach of psychological contract (Morrison & Robinson, 1997).

4. Diagnosis in a banking institution.

Within the scope of an agreement established with a Portuguese banking institution, we were asked to carry out a diagnosis on the well-being of the company workers. We began by holding a meeting with the head of the Occupational Health Department, so as to collect data about well-being of the workers and on the most important demands and resources. It immediately became clear, during the course of the meeting, that in addition to the more traditional demands (i.e. workload) and resources (i.e. control, social support), another variable that impacted the well-being of these workers was the relationship between work and family. The inclusion of this variable is in line with the European Working Conditions Observatory (EWCO, 2011) which incorporates in well-being in the workplace the need for workers to see work as a factor that supports their life management, and highlights that it may not necessarily be confined to the work environment. We therefore decided (Carvalho & Chambel, in press) to assess, in this diagnosis, how involvement in the work role is positively related to the family role, namely the process of enrichment by which the resource (e.g. material, skills and perspectives, flexibility, psychological and physical social-capital) gains in work improves individual performance in the family role (Greenhaus & Powell, 2006). The relationship between work-family enrichment and workers' well-being has been well established: with job satisfaction; with life satisfaction; with quality of life; and with better mental and physical health. On the other hand, some organizational and job characteristics have been identified as antecedents of this enrichment. Thus, we analyzed the role of job characteristics included in the Job Demands-Control-Support Model (JDCS, Karasek & Theorell, 1990) to explain work-family enrichment and its relationship with workers' well-being, namely their satisfaction of life and health perceptions. Going a step further, we analyze whether a high-performance work system (HPWS) is an important organization characteristic that is related to these job characteristics. HPWS refers to a group of separate but interconnected human resource (HR) practices that involve flexible job assignments, rigorous and selective staffing, extensive training and development, developmental and merit-based performance appraisal, competitive compensation, and extensive benefits (Takeuchi, Wang, Lepak &Takeuchi, 2007). The assessment was carried out through an online questionnaire and the anonymity of workers' responses as well as the opportunity for them to receive feedback was guaranteed. The sample consisted of workers (N=1390) from different departments

of the bank performing different functions. As expected, we verified that job characteristics were related to work-family enrichment. More interestingly, our results suggest that this enrichment is an important mechanism to explain the relationship between such job characteristics and workers' well-being. Furthermore, High Performance Work Systems is relevant for explaining their perceptions of job characteristics. We may also emphasize that, beyond our original expectations, HPWS perceptions have a direct relationship with work-family enrichment and not only through job characteristics. In accordance with the principles of the JDCS model, the results suggest that when workers experience high job autonomy and supervisor support they have resources to deal with job demands which will most likely result in the construction of positive resource transference from the work to family domain. We verified that the relationship between autonomy and health perceptions occurs through work-family enrichment, and job demands and support have a direct relationship with this outcome. This result may be associated with the fact that job demands and supervisor support are job characteristics that have a direct relationship with health, as suggested by the literature (for example, Shultz, Wang & Olson, 2010). Moreover, we verified that the relationship between job demands and supervisor support with satisfaction with life occur through work-family enrichment, but job autonomy has a direct relationship with this outcome. This result could be linked to the fact that the job autonomy resource has a direct relationship with satisfaction with life, as suggested by the literature (for example, Judge, Locke, Durham & Kluger, 1998). In line with the findings of previous studies (Castanheira & Chambel, 2010; Holman, 2005), our findings also demonstrated that workers' perceptions of High Performance Work System related with their perceptions of job characteristics. When workers' consider the organization to be applying HPWS they regard themselves as having more job autonomy and support and less job demands. Consequently, in order to ensure the presence of these job characteristics, it is important for the organization to invest in selection policies, to enhance training opportunities, develop fair performance appraisals, competitive practices and equity rewards and to promote workers' participation and empowerment. Stemming from our prediction, we verified that HPWS perceptions were significantly and positively related to work-family enrichment. This result might be related to the fact that HPWS related to the affective job variable, for example, affective commitment (Takeuchi, et al., 2007) and this positive job affect was easily transferable by the worker from the work context to the family and, for this reason, we may consider work to enrich the family domain. On the other hand, in relation to the instrumental path, the HPWS enhances a broad range of workers' skills and efforts and we may consider that these skills and efforts to be directly transferred to the family domain and not only through job characteristics.

With this diagnosis, this banking institution learned that: in order to assure the better well-being of its workers, it is important to support them in developing a perception that the accomplishment of their job will enable them to enrich

their family life; such enrichment may be promoted by targeting job characteristics, namely reducing workload and increasing autonomy and social support; applying HPWS may be an important strategy, not only to accomplish the development of the more appropriate job characteristics, but also to directly develop work-family enrichment.

Within the scope of the established agreement, over the next two years the organization will develop a number of actions that follow the recommendations of this diagnosis. At a later stage, we will conduct another assessment with a view to evaluating the extent of its evolution.

5. Conclusions.

There has been extensive debate in the literature on the bridge between the academic and practitioner relationship. These projects have triggered the process of developing a meaningful dialogue and exchange of ideas and actions between academics and practitioners about psychosocial risk prevention and promotions of quality of life at work. As found in these projects, both academics and practitioners desire a closer association, and recognize the potential benefits of being involved in relevant research / interventions partnerships. The organizations are able to develop a new perspective, or to test the one they already have, on the reality they know so well with the support of scientifically grounded literature on both theory and valid measurement instruments. The academics are able to enrich their theoretical knowledge through its applicability and adaptation to the specific context of each organization in which they are able to intervene.

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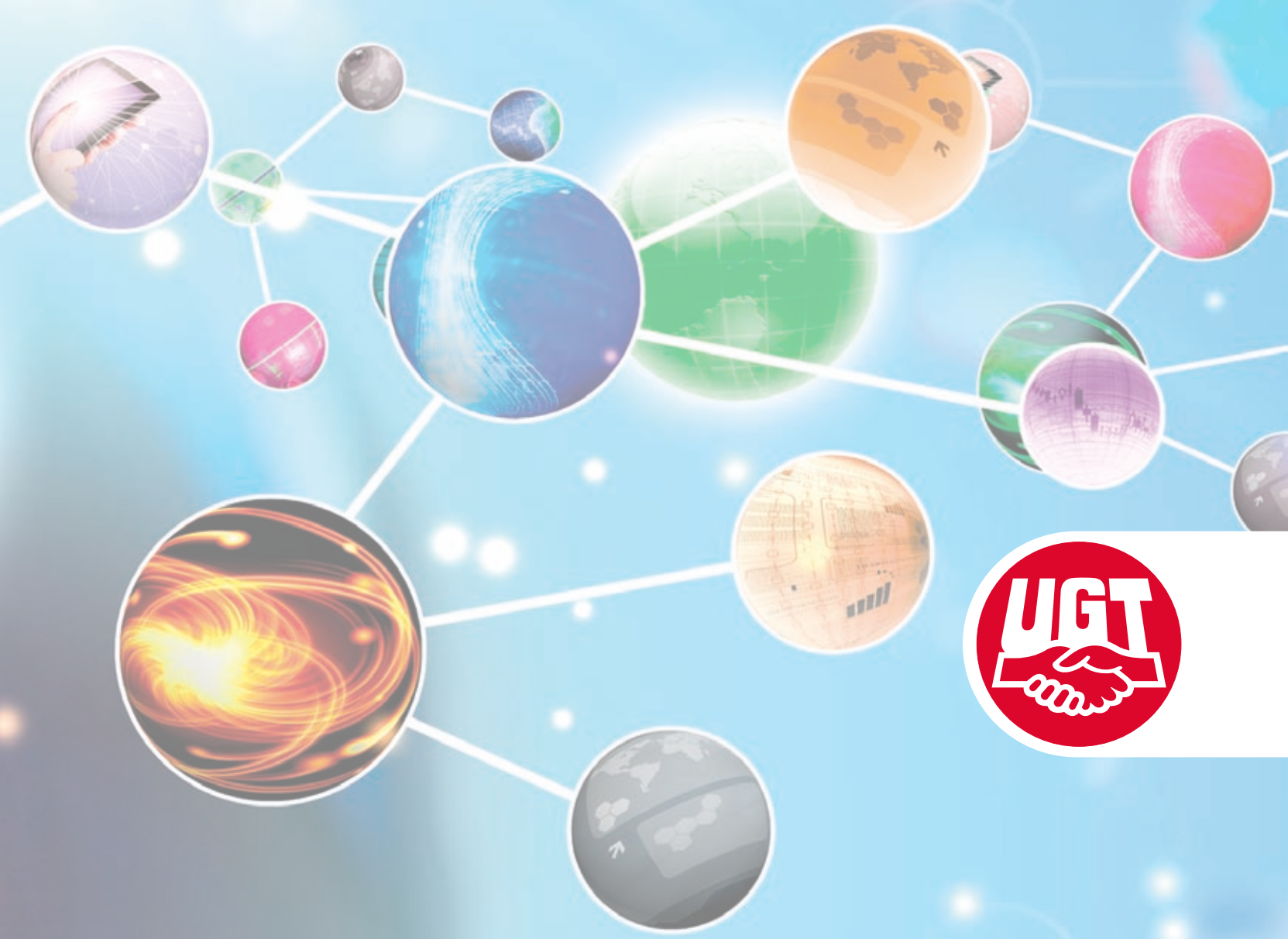

Overview and experiences in english speaking countries in Europe

OVERVIEW AND EXPERIENCES IN ENGLISH SPEAKING COUNTRIES IN EUROPE

UNITED KINGDOM AND IRELAND

ASSESSING AND MANAGING PSYCHOSOCIAL RISKS IN THE WORKPLACE: EXPERIENCES FROM THE UNITED KINGDOM AND IRELAND

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Summary

1. Introduction.

In recent decades, significant changes have taken place in the world of work (EU-OSHA, 2007). Global socio-political developments of increasing globalisation and the establishment of a free market, the development of information and communication technology, and significant demographic changes characterise the development of the modern workplace (Kompier, 2006; EU-OSHA, 2007). There has also been an increase in the use of non-traditional methods of employment practices (such as temporary work, part-time work, flexible work, home working and precarious employment) and implementation of new forms of work methods such as lean production and just-in-time production (EU-OSHA, 2007; Kompier, 2006). This has resulted in raising concern on the effects these new forms of work may have on the health of workers, organisations and communities (e.g. Benach et al., 2002; Benavides et al., 2000; Quinlan, 2004; NIOSH, 2002; Virtanen et al., 2005). All the changes outlined above have been accompanied by the prevalence of new and emerging types of risk to workers' health and safety (EU-OSHA, 2010a) and perhaps the most widely acknowledged of these new challenges are psychosocial risks (EU-OSHA 2007; NIOSH, 2002). Psychosocial risks, also commonly referred to as organisational stressors or work organisation characteristics, and are linked to such workplace problems as work-related stress, workplace violence and harassment (Cox, 1993; WHO, 2003a).

In the UK, according to the 2008/09 Labour Force Survey an estimated 415,000 individuals believed that they were experiencing work-related stress at a level that was making them ill (HSE, 2010). Additionally, the 2009 UK Psychosocial Working Conditions (PWC) survey indicated that around 16.7% of all working individuals thought their job was very or extremely stressful (Packham & Webster, 2009). Estimates from the UK Labour Force Survey indicate that self-reported work-related stress, depression or anxiety account for an estimated 11.4 million lost working days in Britain in 2008/09 (HSE, 2010). This is an increase from earlier estimates, which indicated that stress-related diseases are responsible for the loss of 6.5 million working days each year in the United Kingdom, costing employers around €571 million and society as a whole as much as €5.7 billion.

In the UK, the Health & Safety Executive (HSE) has developed a process based around a set of Management Standards to help employers, employees and their representatives to manage and reduce the levels of work-related stress (Mackay et al., 2004). This approach is also being used in Ireland. It covers six key areas of work design that, if not properly managed, are associated with poor health and well-being, lower productivity and increased sickness absence (HSE, 2007). They refer to good management practice with regard to six main psychosocial risks in the workplace i.e. job demands, control, support from management and peers, relationships at work, clarity of role and

organisational change. The approach has recently also been adapted and used in Italy (Iavicoli et al., 2013). Several studies have been conducted to evaluate the experience of the implementation of the Management Standards. This paper will present the Management Standards approach, evaluating the current state-of-the-art and identifying priorities for the way forward. It will also discuss the recent development of the first standard on the management of psychosocial risks in the workplace by the British Standards Institution.

2. The Management Standards for work-related stress.

The Management Standards approach reflects the UK national legislative framework, which consists of the Health and Safety at Work etc. Act 1974, requiring UK employers to secure the health (including mental health), safety and welfare of employees whilst at work. In addition, under the Management of Health and Safety at Work Regulations 1999, employers are required to carry out a suitable and sufficient assessment of significant health and safety risks, including the risk of stress-related ill health arising from work activities, and take measures to control that risk. The Management Standards are not legally enforceable and have therefore been implemented as a guidance-based approach to work-related stress (Mackay et al., 2004).

To allow organisations to gauge their performance, and to encourage continuous improvement, the Management Standards methodology has a threshold, expressed as a percentage, within the platform statement for each standard. This threshold is the percentage of the work group concurring that the organisation meets the 'states to be achieved' (the Standard). Achieving this threshold is considered to indicate that management practices within the organisation conform to good practice with regard to preventing the occurrence of work-related stress (Cousins et al., 2004).

To enable organisations to measure their performance with respect to the 'states to be achieved' a process and risk indicator tool were developed which included a series of questions, for each standard, to allow organisations to judge their current state based on responses from individuals within their group (Mackay et al., 2004). Cousins et al. (2004) tested the acceptability of the standards and the performance of the indicator tool as a multidimensional measure of work-related stress. This indicator tool has been reported to have robust psychometric properties (Edwards et al., 2008) which have been demonstrated in empirical studies (e.g. Bartram et al., 2009).

The Management Standards were envisaged to apply principally to teams and work groups that were small, but of sufficient size to allow a meaningful response to the Indicator Tool. The approach is also responsive to personal appraisal of the situation, and encourages participation, involvement and dialogue. The Standards are also written in a way that encourages users to think about the mechanisms by which hazards might be linked to harm, and thus point to opportunities for improvement (Mackay et al., 2004).

In Ireland, the Management Standards have been incorporated into the very popular tool 'Work Positive' which has been used extensively by small and medium-sized enterprises (SMEs) in the country (O'Connor, 2002).

3. Implementation and evaluation.

Since its development, the Management Standards as well the indicator tool have been evaluated through several studies funded by the HSE (e.g., Bond, Flaxman & Loivette, 2006; Broughton et al., 2009; Cousins et al., 2004; Cox et al., 2009; Mellor et al., 2011; Tyers et al., 2009; Yarker, Lewis & Donaldson-Feilder, 2007, 2008). The first was a pilot study prior to the implementation of the approach, in April 2003, to test the use of the draft Management Standards in twenty four organisations. The HSE asked pilot organisations to provide feedback on how practical they found the Management Standards to be and to provide comments on the ease of use of the standards and the associated methodology by means of e-mailed questionnaires, interviews and company reports. General reactions to the pilot of the Management Standards were largely positive. However, some organisations, also expressed reservations about the reliability of some of the results and the amount of time the process took. In all, most of the organisations considered that the approach was helpful and rated the Standards as 7 or 8 (out of 10) in terms of how helpful they had been. Furthermore securing senior management commitment was identified as being crucial for the implementation of such as approach and factors which helped most in securing such commitment was reported to be an existing organisational commitment to tackle work-stress and the desire to be recognised as a good employer (Cousins et al., 2004). To support the implementation of the standards and facilitate uptake by organisations, research has also been carried out on establishing the business case of using the standards as well as identifying management competencies associated with effective management of work-related stress.

Bond, Flaxman and Loivette, (2006) examined the business case for the Management Standards by carrying out a number of meta-analyses on quantitative studies that examined the effect that the six working conditions covered

by the Management Standards have on business outcomes. Although they found varying evidence of support for each of the six areas, they concluded that for the purposes of validating and promoting the Management Standards, quasi-experimental outcome studies that investigate the effects that the Management Standards approach has on business outcomes (as well as, of course, on mental health and attitudinal outcomes) are needed.

Since evidence suggests that manager behaviour is an important determinant of employee stress levels (e.g. van Dierendonck et al., 2004; Nielsen et al., 2006; Saksvik, et al., 2002), a study (in two phases) was commissioned by the HSE to identify the specific management behaviours associated with the effective management of stress at work and to build a management competency framework for preventing and reducing stress at work, linked to the Management Standards. In the first phase of the research 216 employees, 166 line managers and 54 HR practitioners were interviewed. The emergent 'Management competencies for preventing and reducing stress at work' framework identified 19 competencies relating to the management of stress in employees. The competency framework approach puts stress management and the Management Standards into a language and format that is easily accessible to HR professionals and line managers. It also provides a common language to facilitate collaboration between HR, Health and Safety, and Line Managers (Yarker, Lewis, & Donaldson-Feilder, 2007).

The second phase of the research aimed to refine and revise the competency framework and developed a stress management competency indicator tool that measures the degree to which an individual exhibits management competencies for preventing and reducing stress at work. Furthermore, a usability analysis was carried out to provide insights into the range of uses to which the framework and the measure can be put. By clarifying the behaviours needed to manage stress, both the refined framework and the indicator tool allow the development of interventions to facilitate behaviour change, ensuring managers can manage employee stress effectively and, thereby, implement the HSE Management Standards (Yarker, Lewis, & Donaldson-Feilder, 2008).

The usability data suggested that the approach is seen to be useful not just in terms of stress management and ensuring systems are in place, but also for integrating stress management into management and leadership development processes and other areas such as appraisal, coaching, induction and support of managers. However, the evidence also suggested that for this approach to be truly effective, there remains a need for the HSE to offer more guidance, in terms of a flexible tool kit, providing training materials, case studies, guidance and sample tools. The results also suggested that organisations are already using the 'Management competencies for preventing and reducing stress at work' framework and that the framework succeeds in putting stress management and implementation of the

HSE Management Standards into accessible and business-friendly language. Use of the framework has been both at the individual level, enabling managers to access specific and clear guidance about behaviours they should be displaying; and at a group/organisational level, guiding the design of training programmes and interventions. The usability data about the emergent 'Stress management competency indicator tool' has also been encouraging, with the vast proportion of managers who used the measure finding it 'easy' or 'very easy' to answer, relevant to their roles, and accurate in terms of identifying key management development areas (Yarker, Lewis & Donaldson-Feilder, 2008).

Cox et al. (2009) interviewed twenty-four experts in occupational health from the UK and EU using a two round Delphi methodology to explore the strengths and weaknesses of that Management Standards approach and its potential for use as an approach for other common health problems at work. The prevailing consensus among the experts was that the approach works well in principle but less so in practice. Although the respondents agreed that the Management Standards are a needed, innovative, simple, and practical overall approach to managing work-related stress, organisations experience problems following through and implementing risk reduction interventions. Experts also agreed that the Management Standards approach is generally but not always used as the Health & Safety Executive intended.

The findings also indicated a number of strengths and weaknesses of the approach. The Indicator Tool was considered straightforward, inexpensive, easy to access, and useful for benchmarking. The overall approach was considered systematic, providing structure for acting on work-related health, which can have indirect effects on other work-related health problems, and can lead to better general management. However, the experts felt that the Indicator Tool omits a number of important factors that can impact on work-related health, lacks validity, the assessment can be costly, time consuming, prescriptive and difficult to implement. The overall approach requires additional resources and guidance to be implemented, is not adequately supported by practitioner competencies, and is narrowly focused on stress (Cox et al., 2009).

A number of ways to improve the current Management Standards were suggested, relating to 6 broad themes: (i) developing the Indicator Tool, (ii) improving the quality of implementation, (iii) investing in capacity-building, (iv) examining the evidence for its effectiveness, (v) change any negative connotations related to «stress» and «risk», and most importantly (vi) adopting a broader approach to the management of work-related health. Furthermore, there was also consensus among experts that the Management Standards approach should be simplified and

made more flexible for use in smaller organisations and different contexts (e.g. sectors). Additional guidance and resources should be developed and provided. The issue of anonymity in reporting the results of the assessment was also highlighted (Cox et al., 2009).

Results from two employer surveys from the implementation of the Management Standards approach as part of the Sector Implementation Plan Phase 2 (SIP2) (Broughton et al., 2009) show that there has been an increased focus on the prevention of stress and sickness absence in the UK as well as an increase in organisational policies and procedures in place to deal with these issues. The drivers for increased action included policy underpinning, senior management buy-in, good application by line managers, good data collection, and a generally supportive environment. Findings from the 2005 UK Workplace Health and Safety Survey (WHASS) employer survey of 966 workplace health and safety managers indicated high OSH management activity (Clarke et al., 2005). The survey findings indicated that nearly all workplaces undertook health and safety risk assessments, discussed health and safety with their workforce and had a written health and safety policy, while just over half of workplaces had arrangements in place to support return to work of workers on long-term sickness absence.

While, work-related stress is the second most prevalent self-reported work-related ill-health condition in the UK (HSE, 2010), only 3% of enterprises in the WHASS survey ranked work-related stress as one of their top three most common as well as most severe risks in their establishment, while only 5% of enterprises ranked being threatened, verbally abused, intimidated or physically attacked as one of their three most common/severe risks. However when prompted with a list of health and safety risks and asked whether these were present in their workplace, 57% respondents reported the presence of work-related stress and 36% reported the presence of being threatened, verbally abused, intimidated or physically attacked. Compared with private sector enterprises, public sector enterprises were much more likely to rank work-related stress, being attacked, threatened or intimidated, and lone working as one of the top three most common or most severe risks (Clarke et al., 2005). ESENER findings (EU-OSHA, 2010) also support a high concern in British enterprises for psychosocial risks, work-related stress, work-related harassment and violence. However, it is important to note that managers also reported the implementation of a high number of procedures and measures to deal with these issues. It seems then that the implementation of the Management Standards as a national level approach appears to have a positive impact in the area of psychosocial risk management in companies.

For a selection of established risks, respondents in the WHASS survey were also asked about their control of these risks and whether they needed to take further action following the risk assessment. Findings indicated that the risk of work-related stress was reported to be less well controlled than for other hazards. For enterprises reporting less than good control of any risk the foremost perceived barriers to better risk control included costs, lack of time and worker resistance. Other barriers included lack of training, lack of staff, planning difficulties and lack of communication with managers (Clarke et al., 2005). The SIP2 surveys also indicated that the main barriers to taking forward absence and stress management in British enterprises were a lack of financial resources, a lack of information and training, and a lack of commitment to implement changes. The management of the causes of work-related stress also raised a number of specific issues for organisations. These included defining and recognising stress, addressing the stigma of stress and talking openly about stress. More specifically line managers were reported to be reluctant to tackle issues which they felt they did not fully understand or that might be sensitive, and it was therefore considered important to ensure that line managers have the training and support to feel fully confident in managing stress (Broughton et al., 2009).

Findings from the WHASS survey indicated that most employers consulted a wide range of external sources for information and advice on health and safety. Generally medium and larger workplaces were more likely to seek advice or information from a range of sources than small workplaces. There was also a general trend for fewer private sector workplaces to have consulted these sources than public sector workplaces. An estimated 8% of workplaces did not consult any external sources of information and advice on health and safety (Clarke et al., 2005), however external support from reputable organisations was also seen as effective for the management of work-related stress in the SIP2 surveys (Broughton et al., 2009).

Since the implementation of the Management Standards approach in 2004, data from the Labour Force Survey (LFS) on the prevalence and impact of work-related stress in the UK shows that the incidence rate of self-reported work-related stress, depression or anxiety has been broadly level over the years 2001/02 to 2008/09, with the exception of 2001/02 where the incidence rate was higher than the current level. In 2008/09, the LFS indicated that an estimated 415000 individuals in Britain, who worked in the last year, believed that they were experiencing work-related stress at a level that was making them ill (prevalence). Self-reports from the LFS also indicated that an estimated 230 000 people, who worked in the last 12 months, first became aware of work-related stress (incidence), depression or anxiety in 2008/09, giving an annual incidence rate of 760 cases per 100 000 workers which accounted for an estimated 11.4 million lost working days in Britain in 2008/09. Occupation groups containing teachers, nurses, and

housing and welfare officers, customer service workers, and certain professional and managerial groups have high prevalence rates of self-reported work-related stress according to the LFS. The LFS also shows people working within public administration and defence to have high prevalence rates of self-reported work-related stress (HSE, 2010).

Results from the Psychosocial Working Conditions (PWC) survey, an annual series of surveys on psychosocial working conditions which began in 2004 to monitor changes in the psychosocial working conditions on the six management standards of Demand, Control, Managerial Support, Peer Support, Role, Relationships and Change indicated that from 2004 to 2009 psychosocial working conditions have not generally changed to any great extent, although the scores on the Change scale and on Managerial Support show a significant upward trend (i.e. an improvement). Findings from the 2007 PWC survey showed a possible improvement in population level working conditions; however the 2008 and 2009 results did not show a continuation of that trend.

According to the 2009 PWC survey around 16.7% of all working individuals thought their job was very or extremely stressful. There is no longer a downward trend in the number of employees reporting that their job is very or extremely stressful and little change in the number of employees being aware of stress initiatives in their workplace or reporting discussions about stress with their line managers. As such the psychosocial working conditions for British employees have not generally significantly changed between 2004 and 2009 (Packham & Webster, 2009). The predicted improvement in working conditions as a result of HSE's roll-out of the Management Standards for work-related stress was not seen to have materialised as yet, and the number of workers reporting that their job is highly stressful was no longer steadily decreasing. However, this data could reflect the long latency between organisations first implementing the process and benefits being realised. Equally, with so many other economic and social factors affecting worker perceptions of their working conditions, any effect may be masked. The HSE is currently conducting a 10-year review on work-related stress in the UK to evaluate developments in this area further with results expected to be published soon.

It should also be noted that the Management Standards have been adapted and are now used in Italy (Iavicoli et al., 2013). The Standards approach was selected on two accounts: firstly, the approach and Indicator Tool had been validated in the UK and Ireland, and are simple to administer in different work settings; and, secondly, specific software is available for data analysis (Cousins et al. 2004; Mackay et al. 2004; Edwards et al. 2008). Furthermore, the approach was deemed directly applicable to the requirements of Italian legislation (Decree 81/08 and its subsequent

modifications and additions). The approach also requires active participation of workers and prevention officers, which promotes cooperation in obtaining information on the organisational context and identifying and implementing corrective strategies (Iavicoli et al., 2010, 2013).

Another recent development in the UK is the launch of the first standard on the management of psychosocial risks in the workplace by the British Standards Institution.

4. PAS1010 – The first guidance standard on the management of psychosocial risks in the workplace.

In early 2011 a guidance standard was issued by the British Standards Institution (BSI) in the form of a Publicly Available Specification on the management of psychosocial risks in the workplace (PAS1010)(BSI, 2011; Leka et al., 2011). This guidance standard has been developed through a consultation process with a European expert consortium, HSE, EU-OSHA, WHO, trade unions and employer associations. It incorporates the key principles of the Psychosocial risk management – European framework (PRIMA-EF) that was built with funding from the EC's 6th framework programme for research. PRIMA-EF was built from a theoretical analysis of the risk management process, identifying its key elements in logic and philosophy, strategy and procedures, areas and types of measurement, and from a subsequent analysis of typical risk management approaches as used within the EU. PRIMA-EF was built on this review, critical assessment, reconciliation and harmonisation of methods that have proved valid in the EU for management of psychosocial risks and the promotion of mental health at the workplace. It is meant to accommodate all existing psychosocial risk management approaches across the EU and be used as a comprehensive, overarching framework for the harmonization of practice and methods in the area of psychosocial risk management. It is also meant to be used as a guidance tool for the development of further methods both in Europe and internationally and provide a benchmark for validation of existing and new methods (Leka, Cox & Kortum, 2010).

Following on the development of PRIMA-EF, harmonising EU approaches, and since there was no recognised standard or official benchmark for good practice in psychosocial risk assessment and management at the European level, a group of key stakeholders, including the PRIMA-EF consortium, WHO, EU-OSHA, HSE, the European Trade Union Confederation and the Engineering Employers Federation (EEF) together with the British Standards Institution worked on the development of PAS1010. PAS1010 is rooted in PRIMA-EF and hence incorporates key principles and elements of all established EU approaches for psychosocial risk management as well as relevant international standards.

PAS1010 is applicable to human resources managers and specialists, occupational health and safety managers and specialists, managers and owners of SMEs, and employee representatives. It provides guidance and recommendations for psychosocial risk management in order to enable an organisation to develop and implement a strategy, and specify objectives which take into account legal requirements and information about psychosocial risks. It is useful for organizations that wish to establish a strategy and process of psychosocial risk management in order to eliminate or minimize risks to personnel and other interested parties who could be exposed to psychosocial hazards associated with its activities; and implement, maintain and continually improve the psychosocial risk management process and related practices. The guidance and recommendations in PAS1010 are intended to be incorporated into any OSH management system. It is intended to apply to all types and sizes of organisations and to accommodate diverse geographical, cultural and social conditions. The framework and approach adopted is compatible with that found in the ILO OSH-MS, ISO 31000, BS OHSAS 18001; BS OHSAS 18002; BS 18004 and ANSI Z 10, all of which are based on the risk management paradigm.It should also be noted that PAS1010 is referenced in and is consistent with the new Canadian national standard on psychological health and safety in the workplace which is auditable (BNQ, CSA Group, MHCC, 2013). However, it is too early to draw conclusions on the success of both these new approaches.

5. Conclusion.

As can be concluded from the information presented in this paper, several good practices on the management of psychosocial risks and the prevention of work-related stress have been developed, implemented and evaluated in the UK. However, more recent approaches, like the BSI standard, needs further time to 'root' before they are evaluated. Approaches developed in the UK have also served as examples in other countries such as Italy and Canada. However, given challenges relating to socioeconomic conditions in Europe, psychosocial risks and work-related stress continue to present challenges for individuals, organizations and society. In the current climate of deregulation observed in the UK and in Europe (Iavicoli et al., 2013), soft law approaches such as the Management Standards and standards seem to be favoured over additional regulation. Since, there is evidence that such approaches can work but only on the basis of a relevant regulatory framework and associated business case, it would be advised that they are promoted together with these facets and not as stand-alone actions.

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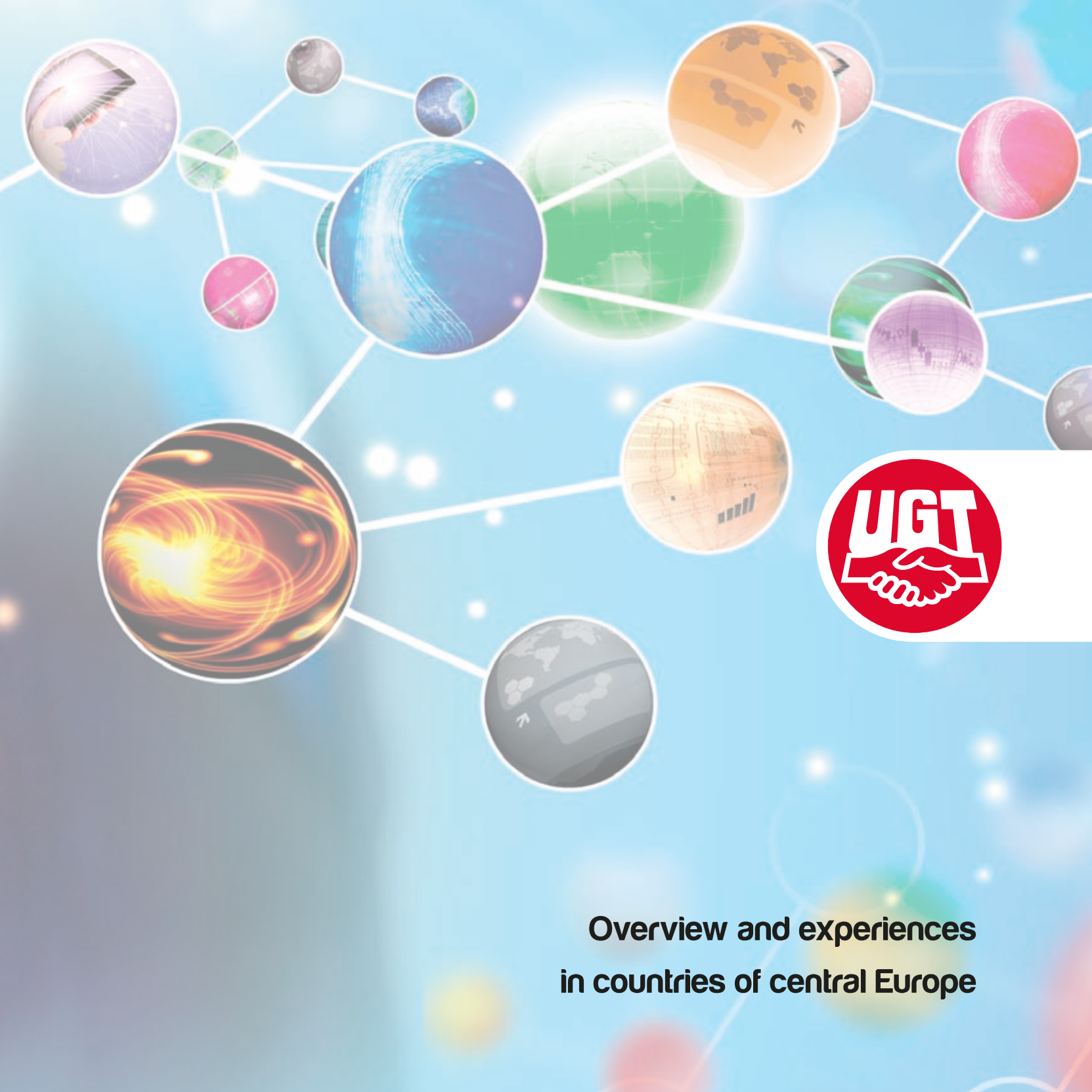

Overview and experiences in countries of central Europe

OVERVIEW AND EXPERIENCES IN COUNTRIES OF CENTRAL EUROPE.

AUSTRIA

THE EVALUATION OF PSYCHOSOCIAL RISKS. CASE STUDIES AND EXPERIENCES FROM AUSTRIA

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Summary

Abstract.

Based on the regulations of the European Union a new workers' protection law was implemented in Austria in 2013. The evaluation of psychosocial risks takes a key role within this law. This means that due to the new legal provisions, companies are requested to evaluate psychosocial risks of their employees for the first time in its existence. The evaluation process should be based on the state-of-the-art of job evaluation and job design research. External experts like work and organizational psychologists should be included in the evaluation process. Finally, the results of the evaluation process should be used for the development and implementation of measures for permanent reduction of psychosocial risk factors.

In our own research we identified new job demands related to social acceleration processes at work. These new demands were identified as potential psychosocial risk factors and therefore included in the evaluation. In this chapter two case studies showing current examples of the evaluation of psychosocial risks including the development of protection measures are presented. The two case studies serve as examples of the chances and challenges of such evaluation processes.

Case Study 1 - public agency: Psychosocial risks were evaluated in a medium-sized public agency located in Austria. The agency offers a wide range of public services related to the areas of business and finance. Due to the range of activities this public agency is described by a variety of tasks. Accordingly we identified specific aspects and risks of the job contents in the agency in cooperation with the organization in a first step. Next, these aspects were included in a comprehensive employee survey, also focusing on employee well-being and work-related outcomes. Based on the organizational structure of the agency, nine local organizational units were defined which were evaluated separately. In each of the units, in a full-day workshop the results of the survey were presented to the managers and experts of the unit. A participative evaluation process lead to the development of measures to reduce the psychosocial risks of the specific unit.

Case Study 2 – information technology: Psychosocial risks were evaluated in a small IT company. A survey focusing on specific risk factors in the company and in the working area of telecommunication was assembled. The participative evaluation process in this company consisted of a large manager workshop and quality circles with employees for each of the organizational units. Measures for specific risk groups (e.g., young technicians) were developed.

Based on the two case studies the strengths and weaknesses of such evaluation processes (which are stimulated by legal requirements and not by the needs of the organization) are discussed. Recommendations for the implementation of a successful evaluation process are given.

1. New demands of modern workplaces.

The world of work has changed considerably over the last decades (Cascio, 1995; Sparks, Faragher & Cooper, 2004). Changes include both societal and technological changes, but also new developments in work design. One of the big drivers of change is the continuous development and implementation of new technologies. On the one hand, new technologies have improved many workplaces. Manual work, which was needed for the production of many products and parts, was replaced by automatized processes and many supportive technologies. Thus, at least in the Western world, there is a general trend to a decrease of physical workload observable. Furthermore new technologies also provided the possibility for more flexibility within the work and therefore can contribute to higher job satisfaction (Kelliher & Anderson, 2010).

On the other hand, there is also a trend to new services. Many workers which were formally confronted with hard physical labor and manual work are now working in service areas and are dealing with customers. Many of these new workplaces are also supported by new information technologies. On the one hand, these technologies brought many improvements (i.e., job satisfaction). On the other hand, new technologies are continuously changing, which leads to new demands on the employees' side (i.e., work intensification; Green, 2004). It seems that because of ever-shortening change cycles, new technologies are also an important trigger of general social acceleration processes (Rosa, 2003). Many facets of our lives and especially the world of work are affected by social acceleration processes.

In our own studies we were able to confirm that such changes in the world of work lead to new demands on the employees' side (Korunka & Kubicek, 2013; Kubicek, Paškvan & Korunka, in prep.). Nowadays employees in many workplaces are confronted with these «new» demands in addition to conventional job demands. We were able to show that the following «new», acceleration related demands play a certain role for employees in modern workplaces in addition to conventional demands (e.g., time pressure; Kubicek, Korunka & Ulferts, 2013; Kubicek et al., in prep.):

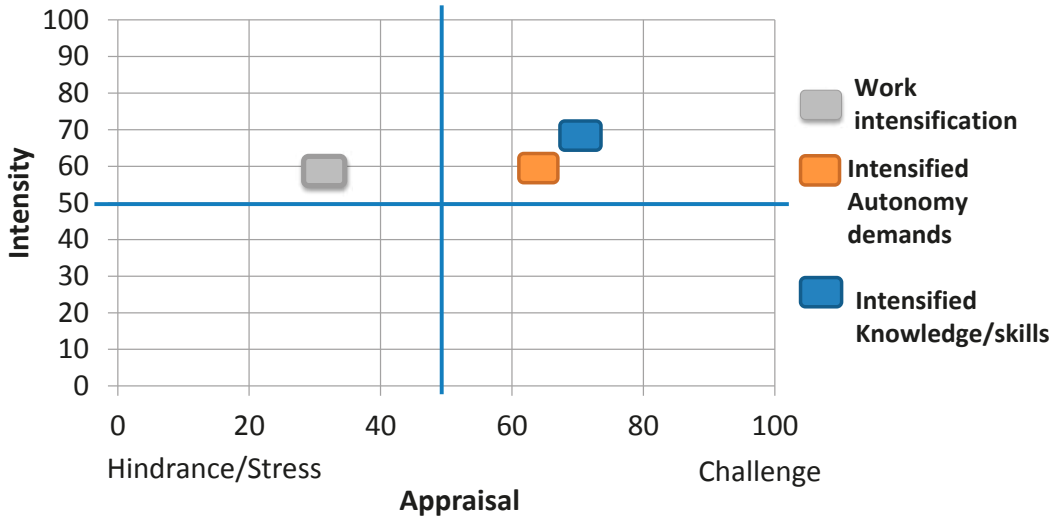
Work intensification is a core demand triggered by global, organizational and technological changes (Green, 2004). For example, recent data of the European Working Condition Surveys (EWCS) shows that an increasing number of employees throughout Europe experience work intensification over the last decades (Eurofound, 2012). Employees report an increasing demand to work to tight deadlines and under high time pressure. Work intensification is defined by the fact that employees have to complete more tasks within same time intervals, by the need to work faster, to reduce idle times and also by multitasking.

Intensified job- and career-related autonomy demands: To stay competitive in a globalized market (Cascio, 1995), organizations are forced to reduce costs, to promote more team-work and to dismantle hierarchical-organizational structures. This in turn puts new pressure on employees. Pongratz and Voß (2003) state that employees are more than ever forced to act autonomously in their work. Work in a "tayloristic-way" seems to be outdated at least in the service sector. Employees should instead behave as flexible entrepreneurs (Pongratz & Voß, 2003). Employees do not only have the possibility to take control over the job, which was conceptualized as a traditional resource (e.g, Karasek & Theorell, 1990), but they are forced to do so. Intensified job-related autonomy demands are characterized by an increasing need to plan and structure work and the working day, to make decisions without supervisor support or direct instructions and to determine work methods. Furthermore intensified autonomy with regard to one´s career means that employees are increasingly forced to plan their careers and to stay attractive on market characterized by global competition. Consequently networking and training courses seem to be an integral part of the working life.

Intensified knowledge- and skill-related learning demands: Since organizations recognized that knowledge is an important economic resource, knowledge is becoming more and more important, (Pyöriä, 2005). Especially in globalized markets knowledge gives organizations the possibility to stay competitive (Loon & Casimir, 2008). Consequently employees are forced to stay in touch and to refresh their knowledge. Furthermore new technology challenges employees to keep their knowledge right up to date. Obschonka and colleagues (2012) conclude that knowledge of technological equipment and skills due to new work forms need to be improved more frequently. As a result employees are forced to develop competences and skills and to keep their work-related knowledge up to date.´

We think that such new demands contribute to traditional demands when it comes to effects on employee well-being and should thus be included in the evaluation of psychosocial risks in current workplaces.

Figure 1: Example of the evaluation of new job demands



2. The evaluation of psychosocial risks in Austria.

The evaluation of psychosocial risks at workplaces in Austria is based on the regulations of the European Union. Since January, 2103 and based on similar laws in the other Germain speaking countries the employers are from now on requested to evaluate psychosocial risks of their employees (Federal Ministry of Labour, Social Affairs and Consumer Protection, 2012). The evaluation of workplaces includes the identification of psychosocial risks, the evaluation of potential dangers, the development of measures to reduce and prevent the risks, and the documentation of the evaluation process. Like in other European countries the evaluation is based on the International Standard ISO EN 10075 (Ergonomic principles related to mental workload). To fulfill the criteria defined by the law the Ministry of Labour recommends the following evaluation process for the companies:

Planning and development of an action plan: A steering committee should be established, including internal and external experts (work and organizational psychologists, health and safety experts, specialists in occupational health medicine). Next, existing information (e.g., existing evaluations of workplaces, health related projects etc.) should be collected. Critical areas of work and specific psychosocial risks need to be defined. Based on these facts a process of the evaluation of the psychosocial risks should be planned and employees should be informed.

Evaluation of psychosocial risks: Adequate and standardized instruments should be used for the evaluation. Depending on the specific context it is recommended to use standardized questionnaires, group interviews, single interviews, focus groups and expert observations.

Development of measures: Based on the evaluation results a process with the goal of the development of measures should be established. Health and safety experts, members of the Union, and employees should participate in this process.

Implementation of measures and quality control: The measures should be implemented and the success of the measures should be evaluated after a certain time period. Especially if there are signs of increases of psychosocial risks (e.g., complaints, health issues, accidents etc.) observable, a further evaluation is necessary.

Documentation: The evaluation of psychosocial risks and the development of the measures need to be documented. Employees should be informed about their psychosocial risks and the improvement measures.

An important characteristic of the evaluation of psychosocial risks is the fact that the risk evaluation and the development of measures should focus on the causes and sources of the problem, and not on the behavior or the satisfaction of the employees. The following four dimensions of sources of psychosocial risks should be included in the evaluations:

Task- and job-immanent psychosocial risks: Work load, physical load, cognitive load, emotional demands, qualification problems etc.

Psychosocial risks on the organizational level: Problems in collaboration and teamwork, information deficits, autonomy deficits etc.

Psychosocial risks of the work environment: Climate, noise, light, working space, working safety, etc.

Psychosocial risks on the level of the work organization: Multitasking, goal conflicts, missing goals and priorities, work interruptions, prolonged work time, missing relaxation times, time pressure, work load, etc.

Since the implementation of the new law in January, 2013, the Austrian Labour Inspectorate urged companies to evaluate the psychosocial risks of their employees. Many evaluation processes have been started, and many experiences in implementing the new law were gathered. As a University Institute responsible for the education of work and organizational psychologists we also evaluated the psychosocial risks in companies. Our goal was to establish an evaluation process based on high quality standards. This included not only the selection of adequate instruments for the evaluation, but also a professional execution of the whole process. Furthermore, we included the evaluation of new, acceleration related job demands (see above) as potential new psychosocial risks in the evaluation process. The following two case studies are presented as examples of evaluation processes.

3. Case Study 1 – Public Agency.

The public agency offers a wide range of public services related to the areas of business and finance. There are about 1000 employees, many of them with University degrees. The agency is an «expert organization» with a wide range of highly qualified jobs. It consists of nine separate units located throughout the country. Nearly all of the workplaces are office workplaces with good ergonomic standards.

3.1. Planning and action plan.

A planning group, consisting of members of the human resources department, a representative of the union, an internal health and safety expert, and an external consultant was established. Since there was no employee survey carried out in the last years, it was decided to combine the evaluation of psychosocial risks with a comprehensive employee survey. Every employee should be offered the possibility to participate in the survey. Both, a paper/pencil and an online version were developed.

Next, possible psychosocial risk factors were defined. There was agreement between the members of the planning group that there do not exist a specific high risks which should have been taken into consideration. On the other hand, it was expected that there are many potential psychosocial risk factors of modern service workplaces, like time pressure, high workload, work interruptions, customer contacts and leadership climate, which should be considered within the evaluation. Thus it was decided to assemble a questionnaire consisting of short scales measuring these and other psychosocial risk factors. The scales were selected from a range of questionnaires based on their psychometric properties. In addition to these «classic» psychosocial risk factors, we included our own scales measuring «new», acceleration related demands (Korunka & Kubicek, 2013) and scales measuring job resources (e.g., social support, autonomy, feedback etc.).

Different tasks are carried out within the nine expert units of the organization. Thus it was decided to evaluate the nine units separately. Based on the evaluation results, measures should be developed for each of the expert units separately. The employees in the nine units were informed about the goals of the evaluation process and the action plan.

3.2. Evaluation of psychosocial risks.

All employees were invited to fill out the questionnaire. Participation was voluntary and anonymous. The response rate was about 40%. Since the distribution of the demographic characteristics (gender, age, job tenure) in the sample was similar to that in the organization, it could be concluded that the data were conclusive for the organization. The evaluation of psychosocial risks consists of two elements: (1) Mean values and the distribution of the psychosocial risk factors were compared to benchmark values of other companies. (2) Risk factors with increased mean values and/or specific distribution characteristics were analyzed in the workshops. As an example, figure 1 shows the mean values of the new, acceleration related demands. All three demands are evaluated as relatively intense (about 60%-70% of the maximum scale values). Only work intensification was appraised negatively as a stressor. On the other hand, intensified autonomy demands, and especially intensified knowledge and skills were appraised as a positive challenge.

3.3. Development of measures.

One full-day workshop was held in each of the nine expert units. About 12-15 managers and experts of the respective units participated in these workshops. The workshops were moderated by the external consultant. Each of the workshops consisted of the following elements:

Presentation of the survey results for the unit: The results were presented by the external consultant. To evaluate the results, the respective mean values for the whole agency and mean values of other organizations in the respective dimensions were also presented.

Evaluation and analysis of causes: The results were evaluated in small groups. Especially for critical results, and also for very positive results, the small groups discussed the possible causes for these results.

Development of measures: Based on the results of the previous step the participants of the workshop tried to develop measures for improvement. First, areas of improvement were defined. Next, specific measures in these areas were discussed and planned.

The following list shows examples for areas of improvement and concrete measures for the units and the whole organization:

Information and Communication: In many units the personal communication between managers and employees will be intensified (formal and informal meetings). Opportunities for a personal contact also to managers of the upper levels will be established.

Feedback and Participation: Measures to improve feedback to the works of the experts (e.g., reports to the top management) were suggested. Feedback should be prompt and constructive. The topic «psychosocial risk factors» will be included in the yearly talks between managers and employees.

Leadership: A leadership mission statement will be developed. Based on this statement, a personal leadership feedback measure will be implemented in the organization.

Elder employees: Age-based task design will be developed as needed. Furthermore, elder employees will be increasingly asked to serve as mentors for younger employees.

New information technologies: It was acknowledged that the increase use of smartphones in the organization increases the stress levels. Rules and standards for the use of emails outside the office will be developed.

3.4. Implementation, quality control and documentation.

Many of these measures were implemented in the nine units shortly after the workshops. Some of the measures needed decisions on the level of the top management of the agency. For instance, the leadership mission statement needs to be developed for the whole agency. An action plan for these measures was developed be members of the human resources department. It was decided that the measures should be implemented within 12 months after the survey. The implementation of these measures was accompanied by an agency-wide communication process. Quality control is carried out by the HR department. Furthermore, it is planned to repeat the survey after about 18 months. A second measure of the psychosocial risk factors will show if the implemented measures were successful. Furthermore, employees will have the opportunity to evaluate the measures. The whole process is documented by the HR department.

4. Case Study 2 – Information Technology.

The IT company offers voice over IP and internet services. The workplaces include technicians, customer care, back office workplaces, and a small call center. Services are offered all over the country for private customers and companies. Many of the workplaces are centered in one office building, with many open-plan offices with good ergonomic standards. The company is part of an international group of IT companies.

4.1. Planning and action plan.

A planning group including two members of the HR department and an external consultant was established. The company offers many health-related services for their employees. The psychosocial risk factors of the employees in the company are known to a large extent. For instance, nearly all of the employees have «all-inclusive» contracts, leading to a high workload because employees tend to work many working hours. Based on the economic situation and the competition similar IT companies in the country, there is a strong pressure on the company. The HR department has a good awareness about the high workload of their employees and offers a wide range of health-related services. There is also a yearly employee survey carried out by the head of the international group of companies.

Since the evaluation of psychosocial risks is mandatory, it was decided to use the information of the regular employee surveys, but also to design a short questionnaire which allows the evaluation of psychosocial risk factors. The questionnaire consisted of short scales widely used in German speaking countries and our own scales on new, acceleration related job demands. The employees were informed about the goals of the project and invited to voluntarily participate in the online survey.

A participative approach for the development of measures was designed, including leadership workshops and quality circles. Based on the organizational structure of the company and the range of job profiles it was decided to organize five quality circles including employees with similar job profiles.

4.2. Evaluation of psychosocial risks.

All employees were invited to participate in the online-survey. The response rate was 61%. The distribution of demographic characteristics in the sample was similar to that in the organization. Thus, the data showed a conclusive picture regarding the psychosocial risk factors in the company. The evaluation of the specific risk factors is based on a comparison with benchmark data and further on the analysis of risk factors with increased mean values.

Work intensification, time pressure and work interruptions were found to be the most important psychosocial risk factors. A specific «risk group» in the company were young technicians, indicated by the highest values in time

pressure and work intensification. On the other hand, a wide range of employees in the company was described by high job resources (interesting jobs with a high degree of variability and a high amount of social support).

4.3. Development of measures.

Two half-day workshops were held with all managers of the company. Similar to the workshops in case study 1, these workshops included the presentation of the results of the survey, the evaluation and analysis of causes for the results, and the development of measures.

Five to eight employees participated in each of the quality circles. First, the specific results for the respective work area were presented and evaluated. Possible causes for the results were discussed from the employees' perspective. Next the improvement measures developed by the managers were discussed and in some cases refined.

As a final step, the results from the manager workshops and the quality circles were integrated. Together with the two members of the HR department a package of measures was assembled and presented to the CEO of the company. The package consisted of the following measures:

Work interruptions: The ergonomic situation in the open-plan offices will be improved. Dividers between the workplaces will be installed. The managers will receive a specific training program in how to prioritize tasks and projects.

Stress, work intensification and time pressure: The opportunities for teleworking will be further improved. Health-related measures will be offered for the specific target group of younger technicians. A specific goal is the increased acceptance for such measures in the target group.

Information and Feedback: Better information offered by the top management will be carried out. In each of the working groups a weekly feedback-meeting will be installed. Social meetings between the departments will be organized.

Career development: A job rotation model will be implemented. An expert pool for employees interested in career positions will be installed.

4.4. Implementation, quality control and documentation.

The above mentioned measures were implemented shortly after the positive decision of the CEO. A second evaluation of psychosocial risk factors is planned about 15 months after the first employee survey. It is expected that a successful implementation of the measures will reduce the psychosocial risk factors. The whole process was carefully documented by the HR department.

5. Reflections on the Evaluation process.

We think that the two case studies serve as good examples of evaluations of psychosocial risks in the two organizations. From these two and other cases we identified the following success criteria of such evaluation processes:

5.1. A mandatory evaluation process.

First of all, it has to be acknowledged that the evaluation of psychosocial risks is mandatory. Based on the workers' protection law the companies are requested to evaluate the psychosocial risks of their employees. The evaluation process is controlled by the Austrian labour inspectorate. If there are some deficits found in the evaluation process, the companies are asked to correct these deficits. The labour inspectorate may even impose penalties if the companies are not willing to carry out the evaluation process along the guidelines.

On the one hand a mandatory evaluation process has some advantages. Companies are requested to evaluate the risks of their employees even if the top management does not want such an evaluation. Common excuses like «the economic pressure does not allow evaluations, there is no time», or «we do have very good working conditions in our company» are not accepted. Thus a mandatory evaluation process may especially improve the working conditions in companies where there is no strong focus on employee concerns. Another advantage of a mandatory evaluation process of psychosocial risks is the fact that there is an increasing awareness of psychosocial risks at work in the general public. The occurrence of psychosocial risk factor is more and more discussed in public media. Thus, employees are increasingly aware on their potential risks and may actively demand that their work places needs to be improved. A general public awareness of such «new» risk factors at work may be a first step for a general improvement.

On the other hand, we all know from many research studies on successful implementation of change processes in organizations that one of the most important success factors is the support of the management. A strong support from the top management and managers on other levels is needed to carry out a successful change process. Since many improvement measures are associated with costs, there needs to be also a willingness to pay these costs and an understanding that such costs may be savings in the long run. Information about the advantages of the successful reduction of psychosocial risk factors, also from an economic perspective, may help to get the necessary support from the management. A successful improvement process needs to be fully supported both by the management, the union representatives, and the health experts in the organizations.

5.2. The role of external consultants.

The involvement of external consultants in the evaluation of psychosocial risks may strongly improve the evaluation process. First of all, external consultants are often experts, not only in the area of psychosocial risks, but also in carrying out successful change processes in an organization. Because of their expert knowledge, especially the participation of work- and organizational psychologists in the evaluation process may improve the evaluation. Because of their specific knowledge of many organizations, external experts are able to evaluate specific risks based on the comparison to other organizations. Furthermore external experts may have an unbiased perception of specific risk constellations and since they are independent it is relatively easy for them to address delicate issues in the organizations. Finally, external experts often do have a broad knowledge about different improvement measures, and how to successfully implement such measures.

Nevertheless it should be mentioned that there are (too) many external consultants in this field. For many consultants the mandatory evaluation of psychosocial risks is another opportunity to expand their business in a highly competitive market. For the managers it is not easy to evaluate the expertise of a specific consultant. This is further complicated by the fact that there are no exact standards defined regarding the evaluation process and the educational expertise of the external consultants at least based on the Austrian law. Since the new law was implemented only a few months ago, we do expect and hope that there will be a development of quality standards regarding the evaluation process in the near future. The quality standards should be defined by work and organizational psychologists, which are the leading experts in this field.

5.3. Evaluation instruments.

Depending on the size of the company, the evaluation method needs to be adapted for each case. We do think that a questionnaire instrument is a useful approach in many circumstances, but such an instrument is only applicable with a certain size of an organization. Assuming an acceptable return rate of about 50%, the minimum size would be about 50 employees. Such a sample size guarantees anonymity (which is also an advantage of questionnaire surveys) and allows reliable results. For smaller companies interviews or focus groups should be employed instead of a survey.

The Austrian Labour Inspectorate published a list of questionnaire instruments which are recommended for the evaluation of psychosocial risk factors (Austrian Labour Inspectorate, 2012). On the one hand, to keep the quality standards of the evaluation process as high as possible, such a list is very useful. On the other hand, work and organizational psychologists do have the expertise do select and use instruments for the evaluation of psychosocial risk factors and should thus not be limited to those. In any case the instrument needs to have adequate psychometric properties.

An important issue is the selection of the dimensions of the evaluation of psychosocial risk factors. In any of our case studies we evaluate a list of standard dimensions of demands and resources on the levels of the job and the organization, like workload, autonomy, feedback and social support. In addition to these standard dimensions the specific psychosocial risks of a company need to be evaluated. The planning group, together with an external expert, should decide which dimensions are selected. For instance, at workplaces with many customer contacts, conflicts with customers and/or emotion work should be evaluated. In addition to the specific risk factors of an organization we recommend the evaluation of «new» job demands like work intensification and intensified learning demands (Korunka & Kubicek, 2013).

One of the biggest challenges in evaluating psychosocial risk factors is the definition of the magnitude of a certain dimension to be evaluated as a «risk factor». For most of the evaluation dimensions, there exist no standard values of risk limits. Certain dimensions need to be evaluated together with other dimensions. For instance, high work load may be a minor risk if there are many job resources available. The comprehensive evaluation of a risk profile of a company is the aspect where the expertise of external experts is definitely needed. Again, we think that work and organizational psychologists do have the best knowledge for a cautious and comprehensive evaluation of risks.

Experiences in the evaluation of risks in other companies and benchmark values of risk factors of other companies may support the evaluation. In addition to the evaluation of the risk factors (i.e., the «causes» of risks), certain outcomes like burnout and work engagement (the «effects» of risks) should be evaluated.

5.4. Implementation of the evaluation process.

A key success factor of an evaluation of psychosocial risks in an organization is the careful implementation of the evaluation project. Since the development and easy application of online surveys it became more and more fashionable to use employee surveys for many different objectives. In many companies, employees are asked to fill out surveys at least a few times in each year. Many of these surveys do not have any visible consequences, and employees do not even receive feedback about the survey results. In such an organizational context the evaluation of psychosocial risks would become just another survey, hardly noticed by the employees. Thus, a very careful implementation of the evaluation process is needed. The particular time of the evaluation should be carefully planned (e.g., there should be no other surveys at the same time). The employees need to be comprehensively informed about the goals and possible outcomes of the evaluation process. A regular evaluation of psychosocial risks should be a matter-of-course and should be seen as a supportive and meaningful measure. A comprehensive, open and transparent communication in all steps of the evaluation process is needed to reach this goal. A quality control of the evaluation process is also necessary, for instance the implementation of improvement measures should be evaluated.

5.5. Improvement measures.

The two case studies serve as good examples showing the range of improvement measures which could be implemented to reduce psychosocial risk factors. Some of the measures are typical improvements which may make sense in many organizations, like the improvement of information and communication processes. Job design improvement like job rotation, job enrichment and job enlargement could be also in many cases a good approach to improve the workplaces. A focus on improving leadership is also a measure which may fit into many organizations. In any circumstances, the specific improvement measures should be in accordance with the goal of the reduction

of specific psychosocial risk factors observed in the organization. There should be a presumption how a certain measure will help to reduce a certain risk factor. Again, expertise is needed to make such assumptions.

In many circumstances workplace enhancement measures should be preferred to behavioral oriented measures. The focus of the development of measures should be the job and the organization. It is the responsibility of the organizations to improve the working conditions of their employees. Only as an additional step behavioral oriented measures (e.g., time management trainings, measures focusing on individual health behavior) should be implemented. Although behavior oriented measures are confirmed as effective, such measures transfer the responsibility to reduce psychosocial risks on the employees.

Since the potential range of measures to reduce psychosocial risks is somewhat limited (many of the measures are based in classic concepts of improving job and organizational design), the implementation of such measures should be very careful. The use of prescription drugs may serve as a good metaphor here. Prescription drugs should be taken with care and as suggested by the experts only when specific symptoms occur. An overuse does not help to further reduce symptoms. It even may have negative effects. Too many drugs used at the same time may also have negative results. In transferring this metaphor to the area of psychosocial risk factors, there needs to be not only a good diagnosis and a specific treatment plan. Measures should be selected with care. It may be better to focus on a few measures which are carefully implemented as trying to improve too many things at the same time. A careful evaluation of the success of the implemented measures is needed.

The two case studies and our final considerations show that the evaluation of psychosocial risk factors is not only a mandatory and important, but also a demanding process for many organizations. A careful implementation of the process, supported by external experts, is needed. Especially experienced work and organizational psychologists do have the expertise to carry out such an evaluation process.

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Overview and experiences in Nordic Europe

OVERVIEW AND EXPERIENCES IN NORDIC EUROPE.

DENMARK

MANAGING PSYCHOSOCIAL RISKS IN DENMARK: RESEARCH AND POLICY INITIATIVES

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Summary

1. Introduction.

In Denmark, psychosocial risk management is high on the agenda (ESENER, 2010). The management of psychosocial risks is characterized by a strong union presence, and collaboration between the social partners and the Danish Working Environment Authority to manage the psychosocial work environment. This has resulted in a large number of initiatives both in terms of practical guidance to organizations on how to manage psychosocial risks but also research in how to improve the psychosocial working environment, the National Work Environment Research Fund solely funds work environment research, including the management and prevention of psychosocial risks in the Danish context.

In this chapter I will focus on three main initiatives. These all represent an applied and integrated approach between research and practice to managing psychosocial risks. First, I will outline the 2020 strategy for improving the working environment in Denmark, including specific initiatives of particular relevance to the psychosocial working environment. Second, I will briefly describe some of the research projects focusing on managing psychosocial risks in the workplace with a particular detailed description of a recently completed project, the Participatory Interventions from an Organizational Perspectives (PIOP) project. Finally, I will describe the Fund for Prevention and Retention, including an example of a «Prevention Package» made available to elderly care organizations outlining a method to improve the psychosocial work environment.

2. The National Strategy for Improving the Working Environment in Denmark.

In 2010, after the completion of the 2005-2010 strategy for a healthy work environment, the Minister of Employment asked the Danish Working Environment Authority to, in collaboration with the National Research Center for the Working Environment and the National Board of Industrial Injuries, develop a background document for the future political prioritization of the work environment initiatives towards 2020. This resulted in a strategy for the working environment efforts up to 2020[1]. The strategy was agreed by the Danish Liberal Party, the Conservative People's Party, the Social Democratic Party, The Danish People's Party and the Social Liberal Party. In the strategy it is stated that «workplaces should be safe, secure, and healthy» (p. 1) and to achieve this goal, the parties agreed a series of objectives and priorities that are to be achieved through 19 specific initiatives. The psychosocial working

1 Vid.http://arbejdstilsynet.dk/~/media/at/at/12-engelsk/rapporter/2020%20engelskpdf.ashx

environment plays a prominent role in this strategy as «the parties agree that psychosocial burnout and stress are serious health and safety issues, and that there are many indications that these issues will still be significant in the future» and «enhancing the focus on the psychosocial working environment is therefore essential (p. 2). The strategy emphasizes that a good working environment is primarily ensured at the organizational level and inspections carried out by the Danish Working Environment Authority are crucial to achieve the goal of a good working environment. As part of the strategy, efforts will be targeted at those organizations that are most at risk for having a poor working environment, including psychosocial risks (p. 1).

The main three goals of the 2020 strategy that have been agreed are:

- The number of serious accidents at work is to be reduced by 25% in proportion to the number of employees.
- The number of employees who are psychologically overloaded is to be reduced by 20%.
- The number of employees who experience musculoskeletal disorders is to be reduced by 20%.

The second objective thus focuses on how the psychosocial work environment can be improved to prevent or reduce the number of «psychologically overloaded», i.e. employees suffering from stress and burnout. Of the 19 initiatives that form the 2020 strategy the first, the fifth and the 17th initiatives are of particular relevance to the psychosocial working environment. These are briefly described below.

2.1 Labour Inspections.

The first initiative concerns the risk-based inspection in two tiers focusing on organizations with health and safety issues[2]. This means that those organizations that have the most serious health and safety issues are subject to the most inspections. In effect, organizations with two full-time employees or more are inspected and approximately half of the enterprises that have between 1 and 1.9 employees are selected randomly for inspection. The risk-based inspection is based on an index model which contains a number of parameters that are business and industry-oriented. Together these parameters are used to identify which enterprises are most likely to have working environment problems. The index will specifically emphasize the psychosocial working environment and if guidance on the psychosocial working environment has been given during an inspection, the index score of the enterprise

2 Vid. http://arbejdstilsynet.dk/~/media/at/at/12-engelsk/rapporter/2020%20engelskpdf.ashx

will increase significantly and result in a new inspection (p. 6). The Danish Working Environment Authority bases its knowledge on the Authority's experience gained from its decisions, guidance on the psychosocial working environment, accidents at work and studies conducted at the National Research Centre for the Working Environment, Denmark (p. 6).

2.1.1. Tools and Methods to Improve the Psychosocial Working Environment.

The fifth initiative focuses on the psychosocial working environment in particular[3]. The parties agree that there are many challenges within the area of the psychosocial working environments and that this is an issue for society, enterprises and the individuals who are affected. The parties involved in the agreement also recognises that maintaining a good psychosocial working environment can result in increased productivity, increased efficiency and reduced sickness absenteeism. The parties agree that the social partners play a central role in finding solutions to how the organizations can improve the psychosocial working environment as do the Danish Working Environment Authority. Together representatives from the social partners (employee, employer and manager organizations), the Danish Working Environment Authority, and the National Research Centre for the Working Environment form a working group uncover methods to identify and resolve problems related to the psychosocial working environment. The outcome of this collaboration is a catalogue of ideas listing the methods and tools (including risk assessment) that organizations can use to uncover and resolve psychosocial working environment issues and provide ideas for the Danish working Environment Authority on how to optimize the collaboration with organizations in these areas.
In 2012, two particular issues concerning the psychosocial working environment was selected as the focus for the fifth initiative[4]:

- Considering the psychosocial working environment when working with including employees with reduced workability in the workplaces.
- Considering the psychosocial working environment when conducting organizational changes.

In particular the second theme on restructuring provides an example of how research and practice are integrated in the Danish context. The theme on organizational changes is based on the research results of two European projects of which the National Research Centre for the Working Environment was a partner (Health In REStructuring: Innovative

3 Vid. http://arbejdstilsynet.dk/~/media/at/at/12-engelsk/rapporter/2020%20engelskpdf.ashx
4 Vid.http://forandringoginklusion.amr.dk/forside---psykisk-arbejdsmiljoe.-forandring-og-inklusion.aspx?AreaID=14

Approaches and Policy Recommendations (HIRES), (Kieselbach et al., 2009) and PSYchological well-being during REStructuring PSYRES (Wiezer et al., 2011). The main conclusions of the PSYRES project were that communication, participation and support play a key role in planning and implementing organizational changes that do not have a detrimental impact on employee health and well-being (Wiezer et al., 2011). Based on these main conclusions the working group developed a set of recommendations and advice on how to manage healthy organizational change processes[5]. In support of the fifth initiative, the second theme on organizational changes formed the basis for the Danish Working Environment Information Centre 2012 campaign on Organizational Changes[6]. The second theme thus presents an example of how different actors on the working environment scene collaborate to maximize the impact on Danish organizations.

2.1.2. Work Environment Research.

The 17th initiative involves the targeting of the resources of the Danish Working Environment Research Fund (DNWERF). This means that the majority of the resources available in the fund will be awarded to research projects focusing on one or more of the three target areas: Accidents, the psychosocial working environment and musculoskeletal disorders. The achievements of the Research Fund are evaluated to assess the impact of the research projects undertaken under the remit of the Fund. More details on the Research Fund are provided in the following section.

3. Danish Research on Psychosocial Risk Prevention.

As previously mentioned, the main funding body for psychosocial risk prevention in Denmark is the Danish National Work Environment Research Fund (DNWERF). Its overall objective is to prevent that individuals are expelled from the labour market because of poor health, work-related accidents and work-related illness (http://arbejdstilsynet.dk/en/engelsk.aspx). The strategy of the DNWERF is to strengthen Danish work environment research. As mentioned above, the 2020 strategy for the working environment identifies the psychosocial working environment as one of the prioritized areas for the DNWERF. Relevant pillars within the DNWERF for the prevention of psychosocial risks are the pillar of psychosocial work environment and the pillar of interventions. The first pillar calls for research on

5 Vid. http://forandringoginklusion.amr.dk/Files/Sagsmapper/Initiativ%205/Psykisk%20arbejdsmiljø%20-%20forandringer.pdf.
6 Vid. http://www.arbejdsmiljoviden.dk/Viden-om-arbejdsmiljoe/Forandringer

the factors that influence the working environment, e.g. restructuring, Health and Safety practices and policies, and the level of social capital in the workplace. Another pillar is the intervention pillar which calls for research on how interventions that aim to improve the psychosocial work environment, reduce sickness absenteeism, and early retirement. Interventions are understood broadly and this includes those initiated by organizations themselves and changes in legislation and social partner agreements[7].

Current intervention research projects funded by the DNWERF under the psychosocial work environment pillar[8] cover a large range of topics from interventions to improve the working environment among employees working in virtual teams, and systematic process-supported participatory interventions to improve the core tasks of the job. Other interventions include interventions aiming to prevent psychosocial risks are interventions to implement senior policies to improve older workers' working conditions, interventions to motivate to continue working, and return-to-work interventions. Interventions targeting specific groups of workers are also funded such as changing lighting conditions according to the season and time of day in hospital intensive wards when employees work in shift-work, or how New Public Management principles may be adjusted to ensure a good psychosocial work environment.

Current research projects under the pillar interventions include psychosocial work environment interventions that through participatory approaches aim to integrate LEAN (Imai, 1986) processes into psychosocial risk prevention, interventions examine the usefulness of simulation tools, or interventions to adapt psychosocial risk prevention tools in small and medium-sized enterprises.

3.1. The Participatory Interventions from an Organizational Perspectives project as an example.

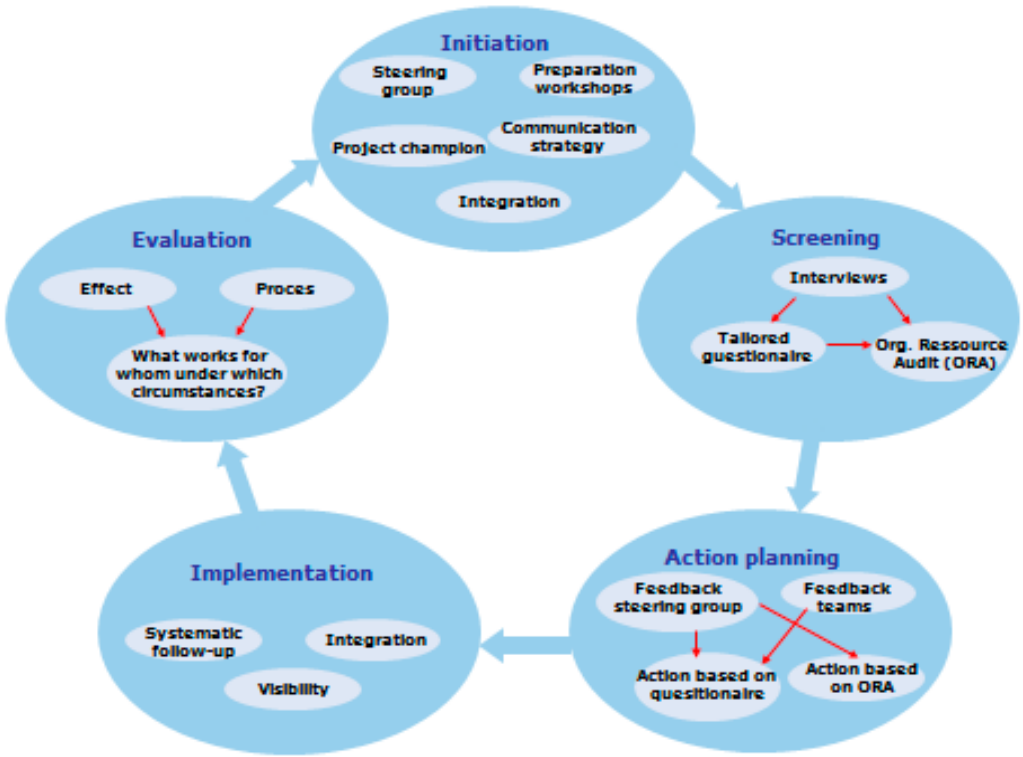
An example of a recently completed participatory intervention project is the Participatory Interventions from an Organizational Perspective (PIOP) (Nielsen et al., 2013). The background for the study was a previous tri-partite initiative, the Consortium for the Development of the Methods for the Prevention of Poor Psychosocial Working Environment – or more popularly known as the Psych Consortium[9]. The Psych Consortium aimed to provide participatory methods for organizations on how to prevent a poor psychosocial work environment and promote

7 Vid. http://arbejdstilsynet.dk/en/engelsk.aspx
8 Vid.http://arbejdstilsynet.dk/da/om%20arbejdstilsynet/arbejdsmiljoforskningsfonden/projekter/igangvaerende-projekter/psykisk-arbejdsmiljo.aspx
9 Vid. http://psykkonsortiet.dk/ServiceTools/OmKonsortiet.aspx

employee health and well-being. The consortium was a tri-partite agreement and the Working Environment Authority and the National Research Centre for the Working Environment undertook a review of some of the methods available in other European countries to improve the psychosocial working environment and together with labour inspectors and occupational health consultants discuss the extent to which methods are transferrable to the Danish context. The Consortium was in operation in the period 2007 to 2009. More information about this project and its outcomes can be found in Nielsen et al. (2010). As part of the activities of the Consortium, the Risk Management Approach developed at the University of Nottingham (Randall, 2002; Rial-Gonzalez, 2000; Cox et al., 2000; Cox, Randall, & Griffiths, 2002; Nielsen, Cox, & Griffiths, 2002) was reviewed and this spurred the interest of an occupational health consultant in the Danish Postal Service. She contacted this chapter's first author and proposed a joint research collaboration which resulted in the PIOP project.

In line with the methods identified by the Consortium, the PIOP project was a systematic phased project including five phases: Preparation, Screening of psychosocial factors and their relationships with well-being, Action planning, Action Implementation and Evaluation (see figure 1). The three guiding principles of the project were: 1) developing tools that would ensure employee participation throughout all phases of the project, 2) focusing on both the positive and the negative aspects of the working environment using the job demands-resources model as its framework (Bakker & Demerouti, 2007), and 3) tailoring the intervention to the local context. And integrating the project into existing practices and procedures For a full description of the project see (Nielsen et al., 2013).

Figure 1: Participatory Interventions from an Organizational Perspective (Nielsen et al., 2013)



3.1.1. Ensuring participation throughout the PIOP project.

At the preparation phase steering groups consisting of employees and (line) managers were established. These groups were responsible for monitoring progress, communication about the projects and its progress and make sure that non-members had their voices heard throughout the process. Preparatory workshops were held for line managers and employee representatives where they would learn about the project, discuss their role in ensuring a successful interventions and how the intervention may be of benefit to them.

A two-step screening phase was conducted. Around 10% of employees were interviewed using the job demands-resources model as a framework (Bakker & Demerouti, 2007). Using cognitive mapping (Harris et al., 2002), employees and line managers would build a map of sticky notes reflecting their working life. The statements obtained from the interviews were then translated into neutrally worded statements. This ensured that the local context, i.e. that the challenges and opportunities of the postal service, was integrated into screening.

During the action planning phase, action plans would be developed at the team level and at the departmental level. Based on group reports, teams would together with their team manager discuss and prioritize results and on this basis develop action plans specific to the team in question. To date, most in intervention projects, including the Risk Management Approach, action plans are developed by a limited number of employees in workshops in this type of intervention projects (Nielsen et al., 2010) but by developing action plans at the team level these were targeted at the problems experienced closely by team members and their development and evaluation was integrated into the local meeting structure.

To ensure implementation, action plans were put on the Kaizen (Imai, 1986) and followed up upon during team meetings. Rather than merely following progress in steering group meeting as is done most often in participatory projects (Nielsen et al., 2010), responsibility for follow-up was allocated to the team to ensure commitment and ownership and allowing for teams to adjust the content and implementation strategy for specific action plans

Finally, ongoing evaluation formed an important part of the team's work. Already at the action planning phase would teams establish how to evaluate whether an action plan was implemented according to plan and which outcomes they expected as a result of the action plan being implemented. During team meetings in the implementation phase, teams evaluated whether action plans were implemented according to plan, and if not, what needed to be done

to enhance implementation, and finally, teams would discuss whether implemented action plans had the expected effects. In other words, formative and summative evaluation was an important part of the intervention process.

3.1.2. Balancing the negative and positive aspects of the working environment.

The JD-R model stipulates that two underlying psychological processes determine the well-being of employees (Bakker & Demerouti, 2007). First, the health impairment process suggests that a situation with high demands combined with inadequate resources will deplete employees' well-being. Over time this may lead to a negative spiral in which employees suffering from poor well-being will further deplete their available resources finding it increasingly difficult to deal with the demands of the job. Second, the motivational process assumes that resources have motivates employees to mobilize resources and gain more resources and as a result experience better well-being (Bakker & Demerouti, 2007). This model was used as a framework for the cognitive mapping interviews, asking employees and managers about the factors that lead to burnout and the factors that lead to work engagement providing a cognitive map including positive factors at work in one side of the map and the negative factors in the other side of the map. Statements were then translated into neutral statement. Participants were asked to indicate whether they appraised a statement as a problematic or a positive element of their work. Using this strategy it was possible to capture both the positive and the negative aspects of the job. The risk of suffering from burnout or the likelihood of being engaged in their work depending on whether they reported an element being either a problem or positive respectively was calculated. Thereafter the frequencies among of either each risk or opportunity were calculated. This gave participants the opportunity to prioritize which issues in the workplace they wanted to focus on improving based on the extent to which changes were likely to reduce burnout and/or increase work engagement.

3.1.3. Taking the context into account.

In the PIOP project, the person-environment fit (broadly defined as the compatibility between an individual and the work environment that occurs when their characteristics are well-matched (Kristof-Brown et al., 2005)) were transferred to the intervention context (Randall & Nielsen, 2012). At the preparation phase, workshops were held with employee representatives and managers to make them reflect on their role and the opportunities to benefit from the project. As mentioned above, the local context of postal workers were integrated into the screening using

a tailored questionnaire. In addition, an audit of the management systems of employee support was conducted to identify the ways employee health and well-being were being managed and to identify existing support structures that may support the PIOP project. Action plans were developed at the systems level and at the team level. This enabled the organization to both address issues at the organizational level and at the local level. Implementation and evaluation of action plans took place at two parallel levels, in the specific teams at the steering group and managerial levels.

The project is representative of many of the intervention projects in the Research Fund in that: 1) it was based on collaboration with an organization, 2) it was participatory in nature, and 3) had established an advisory group consisting of employee and employer organization to ensure its integration with current national practices.

4. The Fund for Prevention and Retention.

In 2007 the Prevention Fund was established. The objective was to provide support the prevention of poor physical and psychological health through the funding of projects undertaken by organizations themselves. These projects could aim to prevent detrimental work procedures and routines, strengthen rehabilitation of the ill and handicapped and to support untraditional methods that increase the awareness of the health risks of smoking, alcohol, obesity and physical inactivity[10]. In its early years, organizations in at-risk sectors could apply for funding (the PIOP project described above is an example of a project that not only obtained funding from the DNWERF but where the organization itself was successful in achieving funding to pay for employees' time spent on the project through the Prevention Fund).

In 2011, the Prevention Fund changed it strategy to, in addition to support, organizations' own ideas for projects, develop Prevention Packages – pre-defined intervention packages that organizations in at-risk sectors could apply for funding to complete. The content of the prevention packages are developed in a collaboration between the National Research Centre for the Working Environment and the Danish Working Environment Authority. In 2012, the Fund changed its name to the Fund for Prevention and Retention as part of the «A good and long working life for all». After this change, the Fund only finances Prevention Packages with a pre-defined content aiming at preventing poor physical and psychosocial health, senior packages aiming to retain older workers in small and medium-sized

10 Vid. https://www.retsinformation.dk/Forms/R0710.aspx?id=31112

organizations at the labour market and flex-time bonuses aiming to encourage organizations to employ people with reduced work ability in flexi-jobs, part-time employment. In this section, I focus on providing information on the prevention packages.

To date, prevention packages have been developed for use in a wide range of sectors from construction over elderly care, policing and transport thus covering both private and public sector institutions[11]. Each package includes information on tools and advice on how to implement the method from start to finish, including evaluation, how much time is required of managers and employees to implement the method, whether consultants are needed to implement the method and if so, how much time is required of them. This very structured approach should help organizations decide whether they have the time necessary to complete the project. In order for organizations to decide whether they have the resources and competencies necessary to successfully implement the package, a checklist of the organization's readiness is included.

4.1. Collegial support as an example.

One example of a prevention package aimed at improving the psychosocial working environment in the elderly care is the «Collegial Support – improve the collaboration with clients and their families» package. The package offers a set of tools and a structured approach to collegial support which allows employees the opportunity to exchange their experiences and solutions as to how they can handle challenging situations they face in the contact with clients and their families. Other benefits are believed to be a better social climate within the teams, a better knowledge of each other's competencies, a shared understanding of what the most challenging situations are and how they can be managed successfully. In the long-term the method is believed to reduce sickness absenteeism, reduce poor psychological and physical health and increase well-being at work.

The package requires the help of a consultant who will be expected to spend a maximum of 191.25 hours on the project (depending on team size), first line managers should expect to spend 15 hours on the project and the overall manager five hours. Depending on the degree of involvement (i.e. whether part of a steering group) employees should be expected to spend 18 to 38 hours on the project. The fund covers the expenses to the consultant and the salaried costs of employees and managers.

11 Vid. http://www.forebyggelsesfonden.dk/forebyggelsespakker.html

Organizations should consider five conditions that should be in place for the method to be successfully implemented:

- Employees, management and the health and safety organization should support the project.
- It should be integrated into existing procedures and work plans such that as many employees as possible have the opportunity to participate.
- Rooms should be available in which to hold meetings.
- The local government should agree to provide a consultant who has knowledge of the elderly care and process management.
- The method works best in groups with about 10 employees.

5. Conclusions.

As outlined in this chapter, Denmark has a strong focus on risk prevention, and in particular the prevention of the poor psychosocial working environment. The social partners play a major role in the strategies to ensure good working conditions for Danish workers and the Danish Working Environment Authority is active not only in conducting inspections but also developing and advising on methods to improve the psychosocial working environment.

The focus on psychosocial risk management is at the organizational, rather than the individual, level, and it is widely acknowledged that workplaces play a major role in promoting a good psychosocial working environment.

It is evident from the examples provided in this chapter that a strong link between practice and research is favoured in the Danish context, and many initiatives have been developed in collaboration with the National Research Centre for the Working Environment.

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SWEDEN

PSYCHOSOCIAL RISK ASSESSMENT AND PREVENTION IN SWEDEN *

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Summary

1. Background and aim.

Modern working life involves higher demands on individual responsibility, blurrier lines between work and private life, increasing flexibility as regards the scheduling of work hours including a high variability from week-to-week or day-to-day, temporary employment contracts and job insecurity, and unstable organizational conditions. This development has raised concerns regarding job-related stress in Sweden, as well as in other countries, and underscored the need to create sustainable psychosocial work conditions for economic competitiveness and occupational health and safety.

This chapter aims to provide an overview of psychosocial risk factors characterizing the contemporary Swedish working life, to describe the institutional frameworks that regulate work environment issues, and to describe how various actors work to prevent psychosocial risk factors. The following section outlines work environment trends and the Swedish system in terms of legislation, various actors on the labor market and so on. Drawing on this, we highlight four sets of psychosocial risk factors (flexible work, working hours, new demands at work, and organizational restructuring) before describing activities related to prevention, health promotion at work and healthy work practices.

2. The Swedish labor market, its policies and psychosocial work conditions over time.

The labor market in Sweden differs in some respects from other European countries. For example, Sweden has a higher degree of labor force participation and more women are in gainful employment (Swedish Council for Working Life and Social Research, 2009). Another important issue with implications for psychosocial work conditions is the emphasis on workplace democracy. The focus on democracy has initiated an interest in how participation in decision-making can influence employee health and well-being (Theorell, 2007).

Although some labor legislation exists in Sweden – for instance, the Employment (Co-Determination in the Workplace) Act from 1976, the Work Environment Act from 1977, and the Working Hours Act from 1982 – a central characteristic of the Swedish labor market is that most issues are regulated in collective agreements between employers' organizations and trade unions. Traditionally, Swedish labor market partners, including employers and employees as represented by their union representatives, have prioritized negotiating around various issues and

these dialogic discussions have typically resulted in collective agreements. Such negotiations have for instance covered salaries, work scheduling and exposure to physical health hazards while issues relating to psychosocial risk factors and ways of improving the work climate and worker well-being have received less attention.

Every other year since 1989, Statistics Sweden and the Swedish Work Environment Authority conduct Work Environment Surveys. Historically, the labor market has been relatively stable. In the early 1990s, however, Sweden went through a big financial crisis and unemployment rates increased considerably (Theorell, 2007). From 1991 to 1999, the percentage of employees reporting having «way too much to do» increased sharply, around 30-50 per cent, while the subsequent decrease was only around 10-15 per cent (Swedish Work Environment Authority, 2012). Parallel to this increased workload, a new pattern of occupational health problems, characterized by stress-related disorders such as burnout, emerged. Between 1993 and 2003, there was a doubling of long-term sickness absences, sleep disturbances, and mental health problems, which has leveled out only recently (Danielsson et al., 2012). At the same time there was a decrease in job control reflecting that employees had less possibility to influence their work situation. Additionally, it should be pointed out that the time trends for many physical work environment factors, such as exposure to noise, show a very stable pattern but often with pronounced differences between women and men.

More recent statistics within the European Union suggest that Swedish workers report higher work demands compared to almost all other EU member countries (European Agency for Safety and Health at Work, 2009). However, the recent European Working Conditions Survey (EWCS) shows that no other member country in EU has had as many organizational changes as Sweden (Eurofound, 2012). Specifically, more than 70 per cent of the workers in Sweden report that they, during the past three years, have experienced restructuring, reorganization or introduction of new work processes and technology. This figure should be related to the EU average, which is around 50 per cent. Such organizational instability – brought about by downsizing, reorganization or restructuring – is a well-known stressor that has been associated with a variety of negative consequences including impaired work motivation, health problems, and sickness absence (Hellgren & Sverke, 2001; Kets de Vries & Balazs, 1997).

A healthy working life is one of the main objectives of the Swedish public health policy, and a main ingredient involves promoting good jobs (Linell, Richardson & Wamala, 2013). The characteristics of a good job draw on research on psychosocial work factors and underscore the importance of (1) having job control, influence over one's own work and opportunities for participation, (2) being able to adapt the pace and amount of work to one's

current work capacity, (3) being seen and being someone that counts, and (4) having some personal development opportunities in the job. However, the realization of this important public health policy is threatened by psychosocial risk factors characterizing contemporary working life.

3. Psychosocial risk factors.

In Sweden, like in other countries, the work environment faces the workforce with various potential risks to employee health and safety. While the psychosocial work environment covers a variety of issues – including social relations at work, opportunities to influence the work situation, monotonous or varied tasks, and various types of demands – it is evident that the contemporary working life is characterized by many «new» types of psychosocial risk factors. Globalization and competition have resulted in additional demands from organizational restructuring and flexible work practices. These include around-the-clock availability, unstable work hours, blurred boundaries between work and private life, intensification of work, excessive responsibility, temporary jobs, and uncertain employment relations. Although these psychosocial risk factors characteristics are highly intertwined, we have grouped them into categories of flexible work, current trends in working hours, new psychosocial risk factors at work, and organizational restructuring and job insecurity.

3.1. Flexible work.

Technological advancements have not only enabled instant communication between colleagues (even in different parts of the world), but also made it easier for organizations to establish themselves in more than one country. Along with the technological development, with fewer employees being needed to accomplish tasks mostly run by machines, the number of traditional industry jobs has diminished (Foley & Polanyi, 2006). In addition, in many post-industrial countries, including Sweden, there is a trend towards an increasing proportion of the workforce being involved in high-technology jobs while manual tasks are being outsourced to countries with lower wages (Kuruvilla & Ranganathan, 2010). As more and more jobs are carried out in order to provide a service, rather than to produce a physical object, the service sector is expanding while the industrial sector is on the decline. Following these changes, an increasing proportion of employees are engaged in «knowledge work», where the product is increased knowledge and the contribution of the individual employee becomes essential – and with each employee having

their unique competence, it becomes more difficult to substitute employees with one another (Allvin et al., 2011). This development raises the question whether the work environment generally improves when manual, «dirty» work is gradually being replaced by service production – or even «exported» – or whether new types of demands emerge in more knowledge-intensive work.

Flexible work has become an umbrella term work for work being carried out outside of the traditional workplace, for example while in transit or at home, or outside regulated work hours (Allvin et al., 2011; Näswall et al., 2008). From an organizational perspective, there is a need for flexible work arrangements in order to maintain competitiveness in a hardening business climate. In the literature, emphasis is placed on various types of flexibility, such as temporal flexibility (when work is to be carried out), spatial flexibility (where work is to be carried out), numerical flexibility (the need to adjust the workforce to fluctuations in demands), and functional flexibility (the importance of having competences that can be adjusted to the organization´s needs) (Sparrow & Marchington, 1998). This constitutes a type of -boundarylessness- (Allvin et al., 2011), where work is no longer bound to a physical workplace or to a particular time of day.

From the perspective of the individual employee, flexible work means that the borders between work and non-work are becoming blurred (Allvin et al., 2011). In Sweden, like in many other countries, a growing proportion of the workforce can work from home or from some other location, and influence when to carry out their tasks. This development partly reflects a deregulation of work, in the sense that it also allows for greater individual influence, and partly a new type of regulation, in that it imposes new rules regarding the timing, location and content of the work to be performed (Allvin, 2008). Although this development involves an increased freedom for the individual to decide when and where to work, it also means that the division between working hours and leisure time is becoming less distinct and that feelings of a work–life conflict may arise. Flexible work may assist in combining work with life outside work, but it may also mean that the number of hours that are spent working or thinking about work increase (cf. Geurts & Demerouti, 2003).

Another central characteristic of flexible work is that more responsibility is placed on the individual employees to provide for their constant competence development (Allvin et al., 2011). While the increased autonomy and flexibility at work represent important advantages of flexible work arrangements, this trend towards individualization of work also means that the individual becomes increasingly responsible for having the necessary skills to perform more autonomous work, sometimes being physically disconnected to the workplace and to co-workers (Allvin, 2008).

In this context, the concept of employability represents an important ingredient in flexible work. Broadly defined, employability refers to the individual's knowledge and experience to carry out one's work, or even perceived possibility to find new comparable employment (Berntson, Sverke & Marklund, 2006). Flexible work inevitably faces the individual employees with the demands to constantly develop their competences to carry out work outside of the traditional organizational arena, to manage increased autonomy at work, and to set their own boundaries between work and private life.

3.2. Current trends in working hours.

According to the 5th European Working Condition Survey (EWCS; Eurofound, 2012) the average number of weekly working hours in Sweden amount to approximately 39 hours, which corresponds to the average for the current 27 EU member states (EU27). Typically, women work fewer hours than do men but this difference is decreasing. Over the past decade, there is a trend showing decreasing working hours and this is regardless of them being measured weekly or annually (Swedish Council for Working Life and Social Research, 2007). Although working fewer weekly hours is more common, long working hours are frequent. The 5th EWCS shows that 50 per cent work more than 10 hours per day at least once a month. This is considerably higher a share compared to the EU 27 average, which is 32.3 per cent. Additionally, reports suggest that unpaid overtime work has increased during the last five years, particularly among white-collar workers in the private sector. It should also be pointed out that a relatively large group of individuals (17.6%) has very long working weeks, working more than 70 hours per week (Eurofound, 2012).

The change in weekly working hours partly results from increased part-time work, particularly among women. In 2010, 26.4 per cent worked less than 34 hours per week, while the corresponding figure for 2000 was 19.5 per cent (according to Eurostat). Some unions argue that the increase in part-time work is related to work intensification, such that for certain occupations, primarily female-dominated ones, the workload is so high that many workers are unable to work full-time.

The last decade has seen a political discussion regarding the potential of improving work–life balance and health by substantially reducing the amount of weekly working hours. Figures showing that about 50 per cent of the workers in Sweden would like to reduce the number of weekly work hours (Eurofound, 2012) should be considered keeping this discussion in mind. As a result of political negotiations, a large-scale study of reduced work-hours was

initiated within the public sector. Additional staff was employed and workers retained their salaries. Findings from this initiative showed that work–life balance, self-reported stress and subjective sleep improved when the weekly working hours were reduced, whereas no effects were found on objective health markers, such as sickness absence (Bildt et al., 2007). Considering these findings, which have been replicated in other studies (von Thiele Schwarz et al., in press), the Working Hours Act and the paragraph stating that working hours should not exceed 40 hours a week have remained unchanged.

Another specific characteristic of working hours in Sweden is that employees typically have a large influence on their working time arrangements. In the last EWCS, 62.1 per cent of the workers in Sweden agreed that they could at least partly decide their working hours. The corresponding figure within EU27 was much lower, namely 40.8 per cent. Thus, relatively high levels of work time control, in terms of being able to influence when to start and finish a work shift and when to have a day off, is common in Sweden. One obvious advantage of high work time control lies in it enabling a good work–life balance. Compared to other European countries, workers in Sweden report it being less of a problem taking 1-2 hours off to take care of personal and family matters during working hours. More than 85 per cent report that working hours fit with family or social commitments outside work, which is somewhat higher compared to the corresponding figure for EU27 (81.5%). Also, the EWCS shows that workers in Sweden have a larger variability in daily and weekly working hours compared to most other European countries.

About 20 per cent of the working population in Sweden has non-daytime (i.e., outside the time interval 07.00-19.00) work hours. Although employee-based flexible working hours such as self-scheduling are common in Sweden, many shift workers (36%) complain about their poor possibilities to influence their working times (Åkerstedt et al., 2012). Short (<11 hours) time for rest between shifts, split shifts and many consecutive workdays are typical components of the shift systems and are risk factors for sleep/wake problems, poor health and work-private life problems. Yet, long shifts, in particular 12-hours shifts during the weekend, are common in many sectors. As regards shift work, there is a relatively large discrepancy between the ergonomic criteria for shift scheduling and the existing shift systems in Sweden. There is no international data to compare with but the study by Åkerstedt et al. (2012) suggests that sub-optimal working time arrangements among shift workers in Sweden may have negative consequences for sleep, safety and long-term health. One possible explanation to this is that many shift workers prefer compressed shift schedules which allow for prioritizing social needs.

To conclude, the main characteristics of Swedish working hour arrangements include the large possibilities for employees to influence their own working times and that many women work part-time. Although large possibilities to influence working hours are associated with high work time control, it may also involve compressed working times and long workdays in order to get as many consecutive days off as possible.

3.3. New psychosocial risk factors at work.

The increasing demand on flexibility at both the organizational and employee levels is a recurring characteristic of the contemporary Swedish working life. From the organizational perspective, this flexibility often involves a preparedness to handle the unpredictability associated with rapid changes in the consumer market, high-speed product development, technological changes in production processes along with the global market competition and shorter business cycles. At the employee level, there is an ongoing and gradual change from production oriented work tasks to more service work and knowledge-oriented work (Hellgren, Näswall, Sverke, & Söderfeldt, 2003). This gradual change means that employees generally use more of their mental capacity and less physical effort in performing their work. Importantly, the work is often characterized in terms of a communicative process with the goal being to interpret customer needs and expectations rather than to deliver a manufactured product. To facilitate this process and increase organizational flexibility, employees need a large degree of work autonomy, which enables reacting quickly to customer wishes and demands (Allvin, Aronsson, Hagström, Johansson & Lundberg, 2011). Yet, at the employee level such self-direction and autonomy can be troublesome for those having poor resources for navigating autonomously. Additionally, autonomy can be problematic when combined with vaguely defined tasks and expectations. In line with this, autonomy in the contemporary Swedish working life has been considered as a sort of -pseudo-control- that, for some employees, can act as a stressor instead of helping the employee to gain control over the work situation (Allvin, 2008). If an employee is unsure about what is expected from him/her, and what goals to strive for, it is reasonable to ask if the increased autonomy is beneficial and also whether the employee has in fact gained any control at all.

Today, everything from business administration, personnel economics, social contacts and meetings to costumer/consumer contact is conducted with the aid of computer systems and the internet. Computerization and the increased use of the internet have affected the individuals immediate work tasks and created new potential stressors. For example, it has been argued that many computerized work tasks imply that jobs are becoming more fragmented and that the individual has difficulties to judge if and when a task is completed, and at what quality. Along with the

increasing autonomy, this may put pressure on the individual to keep up with development - for example regarding computer programs and program updates - which may result in competency demands in order to stay adjourn and employable. This pressure in combination with unclear goals may lead to mental tension and, in the long run, health problems (Näswall, Hellgren & Sverke, 2008).

To investigate this, Hellgren, Näswall and Sverke (2008) reviewed widely used measures of work stressors and elaborated on their potential to capture such new types of demands. A series of interviews identified three different demands that characterize the contemporary work environment. The first of these involved a perceived demand to constantly keep one´s knowledge and abilities up-to-date to perform well and be valuable to the organization. This aspect also involved the frustration of not knowing exactly what skills that will be demanded from time to time or in the future, in order to be capable of managing work tasks and remain employable. The second demand involved difficulties in determining when a task or service is completed and this was particularly characteristic of independent work with less access to feedback and support from colleagues and supervisors. Such situations were experienced as stressful, especially for individuals stating that they could have done more but instead chose to consider the task completed. Such stress experiences tend to be more frequent when a work task has no clearly defined end and when colleagues come to different conclusions regarding what is to be delivered which, in turn, can cause disagreement and conflicts between colleagues. The third aspect involved stress experiences associated with having to assess the quality of one's own work, in the sense that individuals often need to assess whether the work product is of a sufficient quality. Also this type of demand typically emerges when individuals are working independently, are solely responsible for the work standards, lack references of similar work, or are provided with too little feedback.

Based on the interview results, Hellgren et al. (2008) developed questionnaire items for each of the three aspects, which were labeled competence demands, task completion ambiguity, and task quality ambiguity. Analyses of survey data including these new psychosocial risk factors along with traditional risk factors such as role overload, role conflict, and role ambiguity supported the notion these new aspects did indeed tap into new aspects of psychosocial demands. Moreover, analyses investigating the predictive value of competence demands, task completion ambiguity, and task quality ambiguity on different outcomes such as job satisfaction, performance and health showed that these new psychosocial risk factors predicted job attitudes and health after controlling for the traditional psychosocial risk factors (Hellgren´et al., 2008).

3.4. Organizational restructuring and job insecurity.

A persistent trend of work intensification and organizational change initiatives, accentuated during the current economic recession, has characterized most post-industrial countries (Eurofound, 2012). Over the past decades Sweden has witnessed an increasing amount of organizational restructuring (e.g., mergers, acquisitions, and privatizations) as a consequence of intensified international competition in the private sector and budget cuts in the public sector. This has resulted in many organizations, plants and agencies having been closed down, relocated or downsized (for an overview, see Sverke et al., 2004). This trend has also brought along other changes, such as the outsourcing of certain activities and insourcing of contingent employees on temporary contracts or more frequent use of independent contractors on very short term contracts (Isaksson et al., 2010). This development and the ways in which organizations strive to adapt to a more competitive environment can be said to characterize the ongoing trend towards organizational flexibility.

This increased flexibility, regardless of its form, will undoubtedly impact on the individuals within the organizations. For instance, downsizing appears to have the potential to impair employees work attitudes and well-being (Isaksson, Hellgren & Petersson, 2000) and organizational instability and restructuring have even been identified as prominent risk factors for cardiovascular disease (Westerlund, Theorell, & Alfredsson, 2004). Some employees even report being trapped in a certain occupation in the sense that they have no opportunities of leaving a job they feel may be detrimental to their health and development (Aronsson & Göransson, 1999). A most profound consequence of the organizational flexibility is that the employees have to handle the uncertainty regarding the future continuation of their employment but also with uncertainties relating to future content of their jobs. This is the returning of an old issue: already in the 1930s, Marie Jahoda (1982) showed that with work not only providing an income but also fulfilling central psychological needs, a permanent and secure job is of high centrality to individual functioning and development.

Today the concept of job insecurity has a central role in research on re-organizations, downsizing, and closedown threats. Job insecurity has been defined as -the subjectively experienced anticipation of a fundamental and involuntary event- (Sverke, Hellgren & Näswall, 2002, p. 243). This definition rests upon two important aspects within job insecurity research, namely that job insecurity is involuntary and that it is a subjective experience. The issue of involuntariness means that the experience of job insecurity is something that occurs against the individual´s will, that is, an unwanted event, as opposed to willingly accepting a time limited contract. The subjectivity refers to

the individual´s subjective experience of job insecurity which suggests that two employees exposed to the same objective work situation can experience different levels of job insecurity. However, job insecurity perceptions might involve more than the anticipated loss of a job; in view of this the concept has been broadened to also include fears of losing important job features, such as carrier opportunities, interesting work tasks, salary development and training (Hellgren, Sverke, & Isaksson, 1999).

Until now, research on job insecurity has concluded that this experience may have negative consequences for both the individual and the organization. As for the individual, research clearly shows that job insecurity experiences are associated with decreased psychological well-being and poorer physical health but also to impaired job attitudes and poorer motivation. For the organization, employees' perceptions of job insecurity are linked to lower organizational commitment and trust in management, a stronger propensity to leave the organization, and poorer job performance and pro-organizational behaviors in general (for meta-analysis results, see Cheng & Chan, 2008; Sverke et al., 2002).

4. Healthy work and health promotion.

In Sweden, the employers' responsibilities of the work environment are stipulated in the Work Environment Act. Among other issues, the employer is to provide a safe and secure environment including its physical, mental and social aspects. While the physical work environment can be relatively easily measured, monitored and adjusted, handling the psychosocial work environment involves more challenges. Obviously, this follows from the psychosocial work environment being related to human cognitions and behaviors of all individuals at a specific workplace.

Over the last decades an increasing body of research has shown that various psychosocial factors at work are linked to both mental and physical health outcomes as well as work attitudes and behavior. Most notably, high job demands and poor resources have been consistently related to mental distress, burnout, musculoskeletal disorders and cardiovascular diseases. Such negative health effects of psychosocial work factors involve, in turn, costs relating for instance to reduced productivity and sickness absence. In view of the costs involved in sickness absence, the past decade has seen an increased interest in various ways of decreasing sickness absence figures and increasing health among employees. Partly, this also relates to the fact that it from 2003 onwards is mandatory for organizations to report sickness absence figures in their financial statements and annual reports (Arbetsmiljöupplysningen, 2013).

5. Healthy work practices.

Poor psychosocial working conditions have not only been found to be predictive of psychological, health-related and work-related outcomes but also appear to result in the perception that work is detrimental to health. A recent longitudinal study (Näswall, Sverke, & Göransson, in press) indeed found such health appraisals to mediate the effects of psychosocial risk factors on subsequent work attitudes, even after controlling for self-reported health, dispositions and demographics. Such findings clearly suggest that psychosocial risk factors have consequences that cannot be explained merely by reference to employees with poor health being more susceptible to risk factors at work. More importantly, they also signal that demands at work are not only predictive of the individual employee´s health and well-being but may also be counterproductive for the organization. This was also the key message of a recent Swedish research program aiming at creating successful and healthy organizations (Kungliga Ingenjörsvetenskapsakademien, 2009).

There are many ingredients to healthy work practices. One of the perhaps most known aspects concerns the provision of social support, as outlined in the classical work by Karasek and Theorell (1990). Such support may come from managers and colleagues, but also from family members and friends, and help the individual employee to emotionally cope with a demanding situation or provide instrumental hints regarding how to deal with stress at work. Other characteristics of healthy work practices may involve clear goals and feedback regarding how the employee performs in relation to overall expectations from the organization. Also opportunities to exert control at work and influence are important to recognize in this context. While such control is considered to have positive consequences in general (Karasek & Theorell, 1990), a concrete example is when employees are given the possibility to influence the scheduling of their work hours (Åkerstedt et al., 2012). In a general sense, the basic message of a growing amount of research is that demands at work need to be balanced by a variety of resources that are necessary employee well-being and overall job performance (Bakker & Demerouti, 2007).

Other characteristics of healthy work practices involve opportunities for participation in decision-making (Heller, Pusic, Strauss, & Wilpert, 1998) and organizational justice (Thibaut & Walker, 1975). Employee participation represents an extension of the control concept and contributes to employees' understanding of, and active participation, in the organization. Organizational justice refers to employees' perceptions of fair treatment by the organization, and a distinction has been made between various aspects of justice. Distributive justice concerns the perception that factors such as rewards and tasks are distributed fairly and procedural justice concerns the procedures underlying such

distributions, while informational and interpersonal justice rather mirrors the extent to which adequate information is given and employees feel treated in a respectful manner (Colquitt et al., 2001). These types of healthy work practices have been investigated also in relation to organizational restructuring. For instance, in a study comparing two organizations that implemented downsizing in different ways (proactively vs. reactively), it was found that proactive downsizing was characterized by stronger perceptions of justice and greater opportunities for participation, as well as more positive attitudes towards the downsizing and a stronger commitment to the change initiative. In addition, in the proactive organization, the employees reported fewer psychosocial risk factors and more positive attitudes towards work and the organization, as compared to the reactive organization.

Healthy work practices undoubtedly faces management with challenges. They require management to build supportive and trustworthy relations with their subordinates, and to provide not only information but also opportunities for participation in a climate characterized by fair treatment and support. Healthy work practices also faces trade unions with a number of challenges; although the protection of the work environment has been a traditional task of labor representatives, the modern working life faces the unions with a number of challenges in order for their members to perceive they get the support they are paying their dues to receive (Näswall & Sverke, in press).

5.1. Prevention and health promotion.

Obviously, there are challenges involved in developing, maintaining and promoting healthy work practices that foster positive functioning and health across different levels within an organization (Collins & Holton, 2004; Powell & Yalcin, 2010). Some initiatives, such as reducing work hours with retained incomes for individual employees, have been the result of political agreements and focused on changing the number of work-hours to increase the balance between work and non-work spheres and thereby promote health and well-being. So far, however, systematic intervention studies show no clear positive effects of reduced work hours (Bildt et al., 2007; von Thiele Schwarz, Hasson & Lindfors, in press). Also, such changes involve organizational costs for employing additional staff and challenges regarding for instance work scheduling and knowledge transfer between work groups.

Other interventions have focused on promoting health behaviors but, instead of the traditional focus on alcohol or smoking habits among individual employees, there has been an increasing interest in promoting and increasing levels of physical exercise among all. One such intervention included mandatory exercise scheduled during working

hours for all employees two times a week with employees choosing type of exercise. Over a 12-month period, physical exercise was found to have expected positive effects on employee health including reduced musculoskeletal complaints. Importantly, although substituting work tasks with physical exercise, there were no negative effects on psychosocial factors such as job demands. Instead, there was an increase in productivity levels and costs for sickness absence decreased at the workplace level. However, while physical exercise during work hours seems to have positive effects at both individual and organizational levels and target factors linked to physical health, costs and productivity, the long-term effects on factors relating to various aspects of the psychosocial work environment remain to be investigated (von Thiele Schwarz et al., in press).

Focusing more specifically on the discussion of issues relating to the psychosocial work environment, other intervention studies have underscored the need and value of dialogue-based interventions (e.g., Bergman, Arnetz, Wahlström´& Sandahl, 2007; Göransson et al., in press; Lohela et al., 2009). Such a dialogue, including smaller groups of employees, is considered a fruitful technique for improving the communication between individual employees, aid problem solving but also to give employees an opportunity to voice and learn about their individual experiences of the work environment and together establish a shared understanding and knowledge of the psychosocial factors at work. Although the number of studies is limited, findings suggest that the process of sharing, learning and problem solving in dialogue-groups can play a role in improving the psychosocial work environment (Bergman et al., 2007). One of the pioneering initiatives – focusing specifically on the psychosocial work environment as related to individual and organizational outcomes – include the multi-center study «Work and Health in the Processing and Engineering Industries» (see for instance Lohela et al., 2009). This multi-center study developed a structured method including screening (by means of questionnaires to all employees), survey-feedback and intervention with evidence-based strategies for particular health problems. The survey-feedback involves meeting with teams/work-groups including both managers and employees and actively discussing the results of the screening questionnaire. Doing this, the aim is to involve employees at different levels with teams focusing on their situation and how to further develop and deal with different aspects of their psychosocial work environment. Central to this process is the development of action plans that clearly specify what goals and actions that are to be taken to fulfill the goals set, the individual responsible for the necessary actions and a specification of a time frame. Importantly, each team supervisor/manager is responsible for presenting and processing the results of the teams/groups this individual leads. Also included was individual feedback to each employee that aimed to motivate employees at risk to deal with their problems through the help of the occupational health care services. Importantly, the feedback was clearly structured using a traffic light denotation thus marking different areas in green (no risk), yellow (some risk) or red (high risk). Overall, the

longitudinal analysis of this intervention showed that improving psychosocial factors at work promoted health and decreased health risks but also decreased losses in production (Lohela et al., 2009).

Although employers in Sweden are to manage and monitor systematically the (psychosocial) work environment, recent statistics show that only about half of workplaces are regularly involved in such work (Swedish Work Environment Authority, 2012). Reasons for this include lack of time both from safety officers and managers although competence and knowledge regarding the benefits of systematically managing the work environment are good and have increased over the years with increasing number of managers participating in various workshops and education programs targeting leadership and psychosocial factors at work. Although being related to employee health and organizational productivity, the regular management of psychosocial factors at work seems not to be prioritized. Organizations that systematically monitor their work environment, including psychosocial factors and health, typically use employee self-reports. Often consultants and occupational health services perform such screenings and use a feedback method to disseminate screening results to employees and managers. Yet, it is unclear how and to what extent managers and organizations make use of the results of such screenings to further develop or change different aspects of the work environment. However, it has been assumed that managerial practices and behaviors, such as managerial support and managers' ways of organizing and structuring work environment monitoring and health promoting organizational initiatives, are linked to employee functioning and health (Collins & Holton, 2004; Powell & Yalcin, 2010). This has increased the focus on various educational and preventive efforts targeting managers, and consultants now provide organizations and their managers with various courses including educational workshops. Noticeably, such educational programs and workshops have increased the managerial and organizational awareness of and competence regarding the effects of various work-climate factors on human functioning, health and well-being.

Drawing on the importance of managers, the value of dialogue-based group discussions and also including the survey feedback method and workshops, one of the recently developed Swedish worksite-based participatory organizational interventions brings together different modules used in previous interventions (Göransson et al., 2013). Additionally, this intervention makes use of the accumulated research findings showing linkages between hazardous psychosocial factors at work and poor health-related outcomes among exposed employees. However, it also underscores the benefits of balancing challenges, demands and resources at work along with the need to match activation and recovery which, in turn, drive positive functioning and long-term health development among employees and are key to healthy work and organizations. This specific participatory intervention uses a survey-

feedback design as a basis for dialogue based workshops. In total, four half-day workshops are carried out over a two-month period. In the workshops, employees and their managers are given dialogue-training and together identify the most immediate psychosocial work environment problems and have then to develop strategies to improve their balance at work. This allows individual employees to reflect on their psychosocial work situation and give them a terminology and tools to discuss with their managers different psychosocial factors and their potential effects on the employees themselves, the team and the organization. Importantly, the way this participatory intervention is structured, the intention is that it can easily be integrated as a part of the regular work environment monitoring within an organization, thus allowing employees and managers to systematically and without involving too high costs or effort continuously follow-up on psychosocial demands that threat organizational flourishing and the various challenges that foster healthy work practices and positive outcomes within an organization. Yet the effects of this short-term worksite based participatory organizational intervention remain unclear but research is underway with preliminary findings suggesting that it may have positive effects on factors relating to the psychosocial work climate.

6. Final remarks.

In this chapter we have shown that, despite tripartite efforts to improve the work environment of workers in Sweden, a number of challenges still remain – and have even become more pronounced in recent years. Important psychosocial risk factors in Sweden include flexible work, working hours, new demands at work, and organizational restructuring, although our review is not to be seen as all-encompassing. Taken together, the challenges for employers and unions are manifold and complex, which also faces work life research with a number of challenges for the future. Our review of psychosocial risk factors in Sweden highlights the need for management, unions and occupational health agencies to develop best practices on how to promote work-related quality of life together with health and well-being for all. Only through such collaborative efforts, with the goal of developing sustainable work conditions and healthy organizations, can worker well-being and organizational effectiveness be combined.

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2

Institutional experiences

The European Agency
for safety and health at work

INITIATIVES OF THE EUROPEAN AGENCY FOR SAFETY AND HEALTH AT WORK FOR THE IMPROVEMENT ON THE EVALUATION OF PSYCHOSOCIAL RISKS: BALANCE SHEET AND PROSPECTS FOR THE FUTURE

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Summary

1. Introduction.

Psychosocial risks and mental health at work – 'European approach' According to the World Health Organisation, mental health is 'a state of wellbeing' in which an individual: 'realises his or her own abilities; can cope with the normal stresses of life; can work productively; and is able to make a contribution to his or her community' [1]. As the definition from the WHO already suggests mental health is a broad concept and thus can be influenced by a large variety of factors (biological, social, economic, individual and environmental)[2]. However there is evidence that some of those factors are significantly associated, positively or negatively, with the quality of the work environment[3].Protective factors at work for good mental health are for example social support; a feeling of inclusion and meaningful work; finding sense in one's work; being able to decide on a course of action during work; being able to organise work according to your own pace[4].

Work can provide individuals with purpose, financial resources and a source of identify, which have been shown to promote increased positive mental wellbeing[5]. There is also strong evidence that unemployment has large negative effects on mental health[6]. Additionally, studies confirm that employees at workplaces where psychosocial hazards are properly dealt with by being eliminated or significantly reduced, show higher job satisfaction and better wellbeing[7]. In short the workplace can be characterised as an important social context in which to address mental health problems and promote employee positive mental health and wellbeing[8].

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1 Ottawa Charter for Health Promotion (1986). Available at: http://www.who.int/hpr/NPH/docs/ottawa_charter_hp.pdf

2 European Commission (2005). Green Paper: Improving the mental health of the population: Towards a strategy on mental health for the European Union http://ec.europa.eu/health/ph_determinants/life_style/mental/green_paper/mental_gp_en.pdf

3 McDaid, D., Curran, C. & Knapp, M., 'Promoting mental well-being in the workplace: a European policy perspective', International review of psychiatry, Vol.17, No5, 2005, pp. 365-373

4 Harnois, G. & Gabriel, P., Mental health and work: impact, issues and good practices, World Health Organisation, Geneva, 2000.

5 McDaid, D., Curran, C. & Knapp, M., 'Promoting mental well-being in the workplace: a European policy perspective', International review of psychiatry, Vol.17, No5, 2005, pp. 365-373

6 Warr, P. B. (1987). Work, unemployment and mental health. Oxford, UK: Oxford University Press.

7 Bakker, A.B., Derks, D. (2010). 'Positive Occupational Health Psychology', In S. Leka and J. Houdmont (Eds.) Occupational Health Psychology, Wiley-Blackwell, Oxford, pp. 194-224.

8 EU-OSHA (2011), Mental Health Promotion in the Workplace – A good practice report.https://osha.europa.eu/en/publications/reports/mental-health-promotion-workplace_TEWE11004ENN

On the other hand, research focusing on the consequences of a poor psychosocial work environment carried out over last several decades has found that it may lead to work-related stress[9]. It has been shown that work related stress may result in mental health problems such as burnout, irritability, depression, insomnia, lack of concentration, poor memory, hostility, aggression, and general long-term mental health complaints[10][11]. In addition psychosocial risks have been associated to diverse physical conditions as cardiovascular diseases, musculoskeletal problems and immunological problems[12].

It is estimated that depression alone will soon be the leading cause of sick leave in Europe[13]. Besides individual suffering and personal costs the consequences of mental ill health have been linked to numerous other detrimental impacts for organisations, such as employees' diminished performance levels and productivity, decreased motivation and high turnover[14]. It pays off for employers to invest in mental and physical health by preventing psychosocial risk factors and related consequences. Diverse costs related to absenteeism, temporary replacement of staff as well as presenteeism can be avoided by taking a proper preventative approach[15].

In short the advantages and benefits of creating a good and healthy psychosocial work environment and in investing in workers´ mental health are numerous, for workers as well as for employers and society as a whole.

The need to become active and promote preventive approaches for decreasing psychosocial risks is not only underlined by the diverse negative consequences to which psychosocial risks may lead.

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9 EU-OSHA (2000).Research on Work-Related Stress.http://osha.europa.eu/en/publications/reports/203/view

10 Nieuwenhuijsen, K., Bruinvels, D., Frings-Dresen, M. (2010). Psychosocial work environment and stress-related disorders, a systematic review. Occupational Medicine, vol 60(4), pp. 277-286 http://occmed.oxfordjournals.org/content/60/4/277.full

11 For an overview see also: EU-0OSHA (2009).OSH: stress at work – facts and figures. http://osha.europa.eu/en/publications/reports/TE-81-08-478-EN-C_OSH_in_figures_stress_at_work/view, Eurofound (2010). Work-related stress, http://www.employment-studies.co.uk/pdflibrary/ef_1110.pdf

12 EU-OSHA (2009). OSH in figures: stress at work - facts and figures. https://osha.europa.eu/en/publications/reports/TE-81-08-478-EN-C_OSH_in_figures_stress_at_work

13 Wynne, R. &MacAnaney, D., Employment and disability: Back to work strategies, European Foundation for Work and Living Conditions, Dublin, 2004.

14 Harnois, G. & Gabriel, P., Mental health and work: impact, issues and good practices, World Health Organisation, Geneva, 2000.

15 European Network for Workplace Health Promotion (2009), A guide to the business case for mental health. http://www.enwhp.org/fileadmin/downloads/8th_Initiative/MentalHealth_Broschuere_businesscase.pdf

European data shows that stress at work and poor psychosocial working conditions are an important issue, always scoring high compared to many other work related risk factors. This can be seen in different kinds of surveys, no matter if workers or managers were interviewed.

2. Stress and psychosocial risk factors in Europe.

According to the EU Labour Force Survey ad hoc module 2007 on health and safety at work, 27.9% of the workers reported exposure to psychosocial risks affecting mental well-being, which corresponded to about 55.6 million workers all over Europe[16].

Changes in the world of work and the financial crisis observed nowadays put new challenges upon many companies, making it hard to function effectively, or even to survive, without implementing necessary structural adjustments as soon as possible. The process of restructuring, however, often leads to deterioration of the psychosocial work environment and workers' wellbeing. An expert forecast on new and emerging risks conducted by the EU-OSHA highlighted the importance of psychosocial risk factors in a changing world of work[17]. The report underlined that especially those risks related to technical and organisational changes as well as those related to socioeconomic, demographic and political changes are emerging.

Fitting to that a recent European opinion poll conducted by EU-OSHA shows that job organisation and job insecurity were indicated as the most common reason for work-related stress with 72% of the workers naming this risk factor (66% in Spain)[18]. Two thirds of workers also stated that «hours worked or workload» were an important factor causing stress. Data from the EU Labour Force Survey ad hoc module 2007 on health and safety at work fits with

16 EC (2010) Health and safety at work in Europe (1999-2007): a statistical portrait, Luxembourg, Publications Office of the European Union.

17 EU-OSHA (2007), Expert forecast on emerging psychosocial risks related to occupational safety and health.https://osha.europa.eu/en/publications/reports/7807118

18 EU-OSHA (2013) Opinion poll on Occupational Safety and Health at work.https://osha.europa.eu/en/safety-health-in-figures/eu-poll-press-kit-2013.pdf

exposure to time pressure or overload of work being the main risk factor with 23%[19]. The 5th EWCS[20]shows that almost two thirds of workers indicate to work at high speed or with tight deadlines at least a quarter of their working time.

When it comes to harassment, the opinion poll revealed that 59% of European workers indicated that being subject to unacceptable behaviours such as harassment were common in their work place (66% in Spain). The 5th EWCS gives more detailed data here, specifying that 11% of workers experienced verbal abuse themselves and 5% reported that they had been threatened or humiliated in the work-place.

3. The gap between the prevalence and measures in place.

This gap between the presence of certain psychosocial risk factors and measures in place to combat such risks can not only be seen in the data based on the opinion poll. Much more detailed data from the EU-OSHA's European Survey of Enterprises on New and Emerging Risks (ESENER) revealed similar results. The ESENER survey recognises the importance of psychosocial risks by including a set of questions especially focusing on psychosocial risks. This was done during the last survey in 2009 and will be repeated in the survey that will take place in 2014. ESENER found that 79% of managers in Europe are concerned about stress at work, however less than 30% of organisations in Europe have procedures for dealing with psychosocial risks. Over 40% of European employers consider psychosocial risks more difficult to manage than 'traditional' OSH risks. The main obstacles cited were 'sensitivity of the issue' and 'lack of expertise'. 40% of enterprises expressed a need for information or support on how to design and implement preventive measures for psychosocial risks.[21]

The secondary analysis of ESENER findings focusing on psychosocial risks suggests nevertheless that there is a tendency among European enterprises to manage psychosocial risks using a coherent, systems-based approach, however, the prevalence of managing psychosocial risks systematically, as well as its extent (how comprehensive

19 EC (2010) Health and safety at work in Europe (1999-2007): a statistical portrait, Luxembourg, Publications Office of the European Union.

20 Eurofound – 5th European Working Conditions Survey (2010).http://www.eurofound.europa.eu/pubdocs/2011/82/en/1/EF1182EN.pdf

21 EU-OSHA (2010). The European Survey of Enterprises on New and Emerging Risks (ESENER), http://osha.europa.eu/en/publications/reports/esener1_osh_management/view

it is) varies significantly between EU countries and sectors. Factors such as regulatory style, organisational culture and organisational capacity play an important role in the psychosocial risk management, and offer a potential route for improving workplace management of psychosocial risks across Europe.[22]

4. Initiatives on EU level.

A wide variety of Community measures in the field of safety and health at work have been adopted on the basis of Article 153 of the Treaty on the Functioning of the European Union, which states that the EU should support and complement the activities of the Member States on the improvement of the working environment to protect workers´ health and safety[23].Based on this European directives were developed and are legally binding. Directives have to be transposed into national laws by the Member States[24]. The Framework Directive of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work with its wide scope of application sets out minimum requirements and fundamental principles, such as the principle of prevention and risk assessment, as well as the responsibilities of employers and employees. The Framework Directive obliges employers in Europe to assess all occupational safety and health risks in the workplace that can harm workers´ health[25]. Accordingly psychosocial risks are to be included in any proper risk management approach. The framework directive includes an important approach on how to deal with an identified risk. Employers always need to check first if a risk can be eliminated or if not eliminated be reduced by taking organisational measures. Only after checking this and implementing the respective measures, measures should be taken to strengthen the individual. With regard to psychosocial risks this means that first measures on an organisational basis, e.g. adapting the work schedule, changing the work task, providing more/different resources, should be taken and only if these measures can´t eliminate or reduce the identified risks sufficiently, individual measures like time-management training, communication training, counselling etc. should be offered. It is important to highlight that proper psychosocial risk prevention, just as any other occupational risk prevention, starts by combating the risk at its source.

22 EU-OSHA (2012). Management of psychosocial risks at work: An analysis of the findings of the European Survey of Enterprises on New and Emerging Risks (ESENER). https://osha.europa.eu/en/publications/reports/management-psychosocial-risks-esener

23 EU-OSHA website https://osha.europa.eu/en/legislation/index_html And Consolidated Version of the EU Treaty on the Function of the European Union (2008).http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2008:115:0047:0199:en:PDF

24 EU-OSHA website https://osha.europa.eu/en/legislation/index_html

25 Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31989L0391:en:HTML

The former European Strategy «*Improving quality at work - Community strategy 2007-2012 on health and safety at work*- highlighted the importance of workers´ well-being by aiming at making well-being of European workers a tangible reality[26]. Based on this, the EU-OSHA started a 4 years project on workplace health promotion, including a focus on mental health promotion[27].

In 2005 the European Commission published a green paper on mental health in Europe. The paper mentions the workplace environment and conditions as an important factor for preventing mental ill health through respective activities[28].Following the green paper an EU high-level conference on mental health and well-being launched the European Pact for Mental Health and Well-being calling for action in five priority areas one of them being the workplace, the others referring to mental health in youth and education, prevention of depression and suicide, mental health in older people, and combating stigma and social exclusion[29].For preventing mental ill health and promoting mental health organisational practices, including the culture of a company as well as leadership behaviour and measures for good work–life balance are mentioned as key factors. Additionally, the pact highlights the importance to address abusive behaviours of any kind in the workplace, including violence, harassment, alcohol and drugs. It further mentions the importance of providing rehabilitation programmes for workers with mental health problems returning to work. Fitting to the five main priority areas of the mental health pact, respective conferences were set up. 2011 the conference on mental health in workplace settings took place in Berlin.

Diverse other activities were funded by the European Commission in order to promote the importance of mental health and psychosocial risks at work. In February 2013 a joint action on mental health was launched, funded under the EU health programme. The joint action will run for three years and focus as a key area on mental health at the work place. It is coordinated by the Universidad de Nova de Lisboa – Portugal and will include 45 associated and collaborating partners from different EU Member States[30].

26 European Commission (2007). Community Strategy 2007-2012 on health and safety at work. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0062:FIN:en:PDF

27 EU-OSHA Websitehttps://osha.europa.eu/en/topics/whp/index_html

28 European Commission (2005). Green Paper, Improving the mental health of the population: Towards a strategy on mental health for the European Union. http://ec.europa.eu/health/ph_determinants/life_style/mental/green_paper/mental_gp_en.pdf

29 European Pact for Mental Health and Well-being (2008).http://ec.europa.eu/health/ph_determinants/life_style/mental/docs/pact_en.pdf

30 European Commission Website on Mental Health (http://ec.europa.eu/health/mental_health/policy/index_en.htm)

The European Network for Workplace Health Promotion ran an EU funded initiative from 2009-2010 under the slogan: Work in tune with life[31]. The EU-OSHA was involved in several steps of the initiative and the ENWHP was on the other hand part of the EU-OSHA advisory group on workplace health promotion. The initiative produced diverse guidance documents, one focusing on the costs that can be saved by taking care of psychosocial risks and two guides providing information for either employees or employers. An accompanying toolbox collects good practice examples as well as tools supporting employers in dealing with psychosocial risks.

Other European actors in the field of Occupational Safety and Health also highlight the importance of dealing with psychosocial risks. The Senior Labour Inspection Conference just finalised an inspection campaign on psychosocial risks supported by the European Commission. As a basis for the campaign a toolkit has been prepared to enhance the number of inspections on psychosocial risks by providing supportive guidance documents. The campaign resulted in more than 13.000 psychosocial inspections all over Europe.[32]

European Social Partners decided to address the issue of psychosocial risks at work and their impact and in the Framework Agreement on Work-related Stress[33] and the Framework Agreement on Harassment and Violence at Work[34]. Both agreements are voluntary and intended to increase awareness and understanding of the topics while in the meantime giving national social partners the freedom to find a national approach that suits best the national situation. The adaption of the framework agreement on work-related stress took place in very diverse manners in the different Member States. While in some Member States the agreement actually triggered a change in legislation in other Member States the implementation of the agreement didn´t go much beyond a translation and joint declaration of the European Agreement. A report from the European Commission on the implementation of the framework agreement summarizes that generally -the implementation of the agreement was a significant step forward and added real value in most Member States while some shortcomings in coverage, impact of measures, and the provision of a comprehensive action-oriented framework were identified-[35]

31 ENWHP website http://www.enwhp.org/enwhp-initiatives/8th-initiative-work-in-tune-with-life.html

32 SLIC (2012).SLIC Inspection Campaign 2012, Final Report. http://www.av.se/dokument/inenglish/European_Work/Slic_2012/SLIC2012_Final_report.pdf

33 http://ec.europa.eu/social/BlobServlet?docId=1479&langId=en

34 http://ec.europa.eu/employment_social/dsw/public/actRetrieveText.do?id=8446

35 European Commission (2011). Report on the implementation of the European social partners' framework Agreement on Work-related Stress.

5. What the EU-OSHA did and will be doing.

The European Agency has been dealing actively with psychosocial risks for many years, including activities such as carrying out an 'Expert forecast on emerging psychosocial risks related to OSH', overview reports (for example 'OSH in figures: Stress at work', 'Mental health promotion in the workplace – A good practice report'), carrying out the above mentioned ESENER survey (including secondary analysis reports)[36], as well as organising pan-European campaigns.

The EU-OSHA campaign is one of the most important tools for awareness-raising and dissemination of information on the importance of worker's health and safety in Europe. Running since 2000, the campaigns are now the largest of their kind in the world. Each campaign is always dedicated on a certain topic. In order to achieve a better distribution and to be able to have a more thorough approach, previously annual, since 2008 campaigns are always lasting for 2 years[37]. The third campaign of EU-OSHA in 2002 was dedicated to work-related stress, and in 2014-2015, EU-OSHA will again be campaigning on tackling stress and psychosocial risks at work.

The following part will go into more detail on what the campaign 2014/2015 aims to achieve and what kind of information and activities the EU-OSHA is preparing within the campaign framework.

5.1. Campaign objectives.

Experts indicate that a holistic approach to managing psychosocial risks is especially effective. An integrated approach to occupational safety and health and health promotions based on the following key elements: ensuring and maintaining a good quality of the work environment and organisation including health-promoting workplace values and culture, providing help for those who already suffer and health promotion for those who are healthy. All of these aspects should be integrated and included in the management intervention plan. A fragmented approach is indicated as not successful, and investing, for example in health promotion only may result in neglecting stressful workplace conditions. The EU-OSHA campaign promotes the holistic approach providing information related to both, assessment and management of work-related psychosocial risks and mental health promotion at work.

36 All EU-OSHA publications are available for free from: https://osha.europa.eu/en/topics/stress, https://osha.europa.eu/en/topics/whp
37 To know more about EU-OSHA Healthy Workplaces Campaigns visit: https://osha.europa.eu/en/campaigns

The campaign sets out to improve understanding of the issue and bridge the gap by providing support and guidance for workers and employers. It aims at raising awareness of the growing problem of work-related stress and psychosocial risks and enhancing practical skills to prevent and manage them successfully among different groups of stakeholders. The message which the campaign aims to get across the European stakeholders and companies of different sizes and sectors is that, although often more challenging because of the sensitivity of their nature, psychosocial risks can be dealt with in the same logical and systematic way as other health and safety issues. The benefits of a good psychosocial work environment which include improved worker wellbeing, lower absenteeism rates and better general organisational performance, will especially be highlighted for example in a report that investigates the costs of psychosocial risks and associated negative consequences.

The campaign will address the most common concerns and misconceptions related to psychosocial risks and work-related stress from workers and employers. This way we intend to decrease the feeling of employers touching a too sensitive topic when dealing with psychosocial risks and the fears of employees that employers might overstep a boundary and not respect a certain privacy. The lack of common understanding of the terms such as ‘psychosocial risks’, ‘work-related stress’, ‘harassment’ or ‘mental health’ will be addressed in this approach. A simple, practical and evidence-based information on stress and psychosocial risks will especially address the employers and managers of micro and small enterprises.

The campaign wants to motivate enterprises of all sizes across Europe to conduct systematic and effective psychosocial risk assessments and to put in place preventive measures using available practical tools and guidance. The existing international and national practical tools for managing psychosocial risks in the workplace, as provided by the Agency national focal points, will especially be promoted through the campaign website. Additionally, the campaign will encourage employers to take further voluntary actions aimed at mental health promotion.

The campaign publications will also address stakeholders such as policy makers, OSH specialists, social partners, employers’ representatives, and researchers with up-to-date information on the problem with psychosocial risks in Europe.

This campaign will build on the current (2012–13) EU-OSHA Healthy Workplaces Campaign, ‘Working together for risk prevention’, which emphasises the importance of combining good leadership with worker participation. This

approach will be echoed in the 2014–15 campaign, which will advocate that workers and management both need to play an active role and work together to tackle psychosocial risks and work-related stress effectively.

The official launch of the 'Healthy Workplaces Manage Stress' campaign, including a dedicated multilingual campaign Website will take place on 28th April 2014.

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European Commission (2011). Report on the implementation of the European social partners' framework Agreement on Work-related Stress.

European Network for Workplace Health Promotion (2009), A guide to the business case for mental health. http://www.enwhp.org/fileadmin/downloads/8th_Initiative/MentalHealth_Broschuere_businesscase.pdf

EU-OSHA (2011), Mental Health Promotion in the Workplace – A good practice report.https://osha.europa.eu/en/publications/reports/mental-health-promotion-workplace_TEWE11004ENN

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Warr, P. B. (1987). Work, unemployment and mental health. Oxford, UK: Oxford University Press.

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SLIC (2012).SLIC Inspection Campaign 2012, Final Report.http://www.av.se/dokument/inenglish/European_Work/Slic_2012/SLIC2012_Final_report.pdf

National Institute on Safety and Health at Work (Spain)

THE PSYCHOSOCIAL ASSESSMENT INITIATIVES OF THE NATIONAL INSTITUTE OF SAFETY AND HEALTH AT WORK

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Translation: Own author translation.

Summary

1. Introduction.

Psychosociology and hence psychosocial factors and risks are a subject of growing interest. Various facts confirm this statement. For example, already in 2007, the European Agency for Safety and Heal that Work (EU-OSHA), in its publication Expert *forecast on emerging psychosocial risks related to occupational safety and health*[1], noted that in the workplace important changes were occurring that were posing new challenges for the health and safety of the workforce, and these changes would lead to the appearance of a series of psychosocial risks linked to the way work is designed, organized and managed.

This publication classified the ten most important psychosocial risks identified by experts in five areas: new forms of employment contracts and job insecurity; OSH risks for the ageing workforce; work intensification; high emotional demands at work and poor work-life balance.

In this regard, considering these type of risks as «emerging« has also contributed to putting them in the spotlight, not for their novelty, but because their body of knowledge is becoming increasingly widespread.

One further point to add to this is the forthcoming campaign that will be carried out by the EU-OSHA in the period from 2014-2105 under the slogan «*Healthy Workplaces Manage Stress*». This campaign is motivated by the necessity to improve the management and awareness that exists in Europe regarding these types of risks and in this way reduce the gap that separates them from the more «traditional» risks. Spain, as in previous campaigns carried out by the EU-OSHA, will actively participate in its development.

At a national level, it is necessary to highlight the creation in 2012, by a mandate from the National Commission on Safety and Health at Work, of a specific working group on Psychosocial Risks, where the participants included both social partners and public institutions. This group has the aim of putting forward a series of proposals to the National Commission with the objective of increasing awareness and improving the management, assessment and intervention with regard to these types of risks within Spain.

And particularly on the underlying issue on this Yearbook, assessment, the specific campaign carried out by the

1 European Agency for Safety and Health at Work (2007).*Expert forecast on emerging psychosocial risks related to occupational safety and health*. Luxembourg: Office for Official Publications of the European Communities.

Committee of Senior Labour Inspectors[2] (SLIC) during the year 2012 on psychosocial risks assessments, also highlights the need to go into depth on the importance of evaluating and considering these types of risks in labour organizations.

It is also important not to forget that if this is an area of interest, it is so because inefficient management carries with it a series of negative consequences regarding the health of the workers, organizations and society in general.

In the following sections, a brief review will be given on how the National Institute of Health and Safety at Work (INSHT) has addressed psychosocial factors and risks during its existence (already more than 40 years). Subsequently, some of the proposals put into effect by the Institute in the area of psychosocial assessment will be shown. Finally, ideas will be presented on what could be the future course of field assessment.

3. The INSHT and psychosocial factors and risks.

The INSHT, as a national center of reference in Occupational Safety and Health (OSH), has been addressing for years the psychosocial area. This is demonstrated by the Institute's work in the field throughout its existence:

- Development of research projects on issues as diverse as assessment of psychosocial factors, psychological abuse or harassment in the workplace, psychosocial intervention, violence in the workplace protocols, etc.; cooperation with other European OSH organizations (for example, EU-OSHA, the European Network for Workplace Health Promotion-ENWHP- or INNOFLEX); subsidizing of external research projects or the coordination of projects given to the INSHT and carried out within the diverse missions of the Secretary of State for Social Security on external occupational violence, psychosocial risk exploration in Spain, shiftwork, etc.
- The Institute's list of publications[3] on psychosocial issues is also very wide, on both points addressed and formats. For example:
  - The Institute's well-known manuals that act as a reference point for «psychosociology in the workplace»; «mobbing, physical violence and sexual harassment», and «psychosocial intervention».

2 http://www.av.se/SLIC2012/spanish.aspx

3 http://www.insht.es/portal/site/Insht/menuitem.1517d3968e9f595dce5f66a150c08a0c/?vgnextoid=9f164a7f8a651110VgnVCM100000dc0ca8c0RCRD

- Informative documents on mental workload, psychosocial factors and their assessment, work related stress, information and communication, work control, etc.
- Technical Prevention Notes (NTP) on work related stress, assessment, mental work load, work related burn out, psychological harassment, psychosocial intervention, data collection techniques,…
- CD-ROM with the content of Ergonomics and Psychosociology for OSH experts, which has been a benchmark for educational material in numerous courses carried out at a higher level. This material includes diverse psychosocial contents.

- The Institute's training programs[44] have also been substantial – as early as 1979 courses were offered on psychosocial issues- and varied. Just citing the most recently addressed issues in the yearly offers: work related stress, shiftwork, evaluative methodology, FPSICO, psychosocial intervention, mobbing, violence, etc. Also, specialized training is given to Labour and Social Security inspectors, OSH experts within the Public Administration, etc.
- Organization and participation in workshops, congresses, etc.
- The field of new technologies has also been covered. For instance, in the year 2003 the INSHT already had a website dedicated specifically to Psychosociology which was updated and reworked in 2012[5].

As well as all these examples, it is important to cite a few more aspects, such as:

- The organizational structure of the INSHT includes technical units specializing in psychosociology within various National Centers.
- As the body responsible for the National Survey on Working Conditions, from the first survey in 1987 information on psychosociology has been systematically collected.
- In its work in resolving technical queries, we can also find the area of psychosociology. It is important to highlight that the number of queries in this area have had a constant yearly increase, both in total number, as in the percentage of total consultations.
- The public advisory website for small enterprises and self-employed workers on preventive issues- www.prevencion10.es- also considers, in certain tools «evalua-t« different psychosocial aspects

4 http://www.insht.es/portal/site/Insht/menuitem.17d8ca95cac6595dce5f66a150c08a0c/?vgnextoid=59264a7f8a651110VgnVCM100000dc0ca8c0RCRD

5 http://www.insht.es/portal/site/Psicosociologia/

referred to as organizational conditions and personal relations, dealing with clients, nightshifts, etc.

As this far from complete review illustrates, this is an area that has been addressed by the INSHT for numerous years, thus, resulting in a wide body of knowledge, experience, publications, etc. In other words, the INSHT, through its experience, has not only paid attention to risks most closely linked with areas of Health and Safety, but also focused its attention on the aforementioned area of Psychosociology, although it is true that it is only in recent years that it has become most talked about.

In the following section, the approaches carried out by the INSHT will be shown, with regard to the assessment of psychosocial variables within organizations.

4. Initiatives by the INSHT for evaluating psychosocial factors and risks.

The INSHT understands the idea of psychosocial assessment is a process and therefore a succession of combined and interrelated phases. This process is made up of various stages, which have been set out in numerous publications (Manual of Psychosociology in Work, NTP 450 and 702, assessment procedure FPSICO, etc.). This evaluative approach is made up of the following components:

1) Identification of the risk factors.
2) Selection of the «methodology», techniques and tools to be used.
3) Planning and execution of fieldwork.
4) Analysis of the results and compiling the report.
5) Setting up and putting into practice an intervention program.
6) Follow up and control of adopted measures.

The «RISK FACTORS IDENTIFICATION« phase has the aim of defining in the most precise way which aspects are to be researched, collect information from the workplace, tasks, the work environment, the people it is going to be focused on…

In short, its aim is to define which factors and groups are to be the focus of the assessment.

To start with an accurate knowledge of the situation, it is necessary to try to gain as much information as possible. In Nogareda and Almodóvar (2005)[6] it is possible to consult which information and which collection techniques can be used in this first phase.

At this stage it is possible that various questions arise, such as: Will it be necessary to carry out unit analysis, and if so, which? Will it be necessary to use the whole of the working population or can samples be used? Can tests be used? Etc. These and other questions are addressed by Lara (2013)[7] in the work «*Some guidelines to assess psychosocial risk factors*«.

The phase «SELECTION OF METHODOLOGY, TECHNIQUES AND TOOLS» has as its objective to select the best procedures, techniques and tools of psychosocial assessment to be used in the organization. For this, various aspects have to be considered like: factors to be evaluated, what objectives are set, group characteristics, the number of times that similar techniques have been used, the actual possibility of it been carried out, etc. Again, it is recommended to read the previously cited bibliography for further information, and also to resolve any doubts regarding the need to modify ad hoc a «standard method», the viability to collect qualitative data, the option of carrying out simultaneously several assessment procedures, etc.

Finally, in this stage, we can highlight two aspects: In theory, no «method», technique or tool can be considered the best, so a rigorous analysis of the advantages and drawbacks that each one offers becomes a vital task; secondly, it is important not to lose sight of the principle of «triangulation»[8].

The stage «PLANNING AND EXECTUTION OF FIELDWORK» is a crucial phase of the process. Good planning at this stage will save a lot of head scratching later. Questions such as: How to carry out the handing out and collection of the surveys? At which moment of the working day is it best to carry out the interviews and observe how the work

6 Nogareda, C. & Almodóvar, A. (2005). *NTP 702:El proceso de evaluación de los factores psicosociales*. Barcelona: Instituto Nacional de Seguridad e Higiene en el Trabajo. Available at: http://www.insht.es/InshtWeb/Contenidos/Documentacion/FichasTecnicas/NTP/Ficheros/701a750/ntp_702.pdf

7 Lara, A. (2013). Algunas orientaciones para evaluar los factores de riesgo psicosocial. Madrid: Instituto Nacional de Seguridad e Higiene en el Trabajo. Available at: http://www.insht.es/portal/site/Insht/m.1f1a3bc79ab34c578c2e8884060961ca/?vgnextoid=bfecbd1b4b38e310VgnVCM1000008130110aRCRD&vgnextchannel=9f164a7f8a651110VgnVCM100000dc0ca8c0RCRD

8 Cox, T., Griffiths, A. &Rial-González, E. (2005). *Investigación sobre el estrés relacionado con el trabajo*. Luxemburgo: Oficina de Publicaciones Oficiales de las Comunidades Europeas.

is carried out? How is anonymity and the confidentiality of the received data going to be guaranteed? Etc. It is necessary to have the answer to these questions before carrying out the relevant fieldwork.

It is also important that the suppliers of the information receive adequate information before collected the data: Why is this being carried out? What is it going to lead to? How and where will the collected information become available? Etc.

The stage «ANALYSIS OF THE RESULTS AND COMPILING THE REPORT» should reveal the cause/s of the problem/s that have been detected. Also, an assessment of the risks should be carried out, so that conclusions can be drawn on the need to avoid, control or reduce them (article 5.1 of the Regulation of Prevention Services).

We can highlight, too, the fact that whilst many techniques and tools are easy to use, the processing of data and interpretation of the results could, in certain cases, require professional assistance. To know what a score means in a given context may require the participation of an expert, as well as the people directly involved in the work.

Some questions that frequently appear once the data has been collected are, for example: Acceptable response rate in order to consider the evaluation representative, sections to be considered in the report, etc. (Lara, 2013)[9]. On this last question, one of the most important aspects in compiling the report is to present it in the clearest, and most precise way possible, never losing sight that you are dealing with an operational work document that facilitates discussion of the obtained results and the possible measures to be adopted amongst those involved.

The following two phases, whilst not included in the actual evaluative process, are still important in emphasizing what the integrated management of the psychosocial risk would be.

The «SETTING UP AND PUTTING INTO PRACTICE OF THE INTERVENTION PROGRAM«has a legal foundation in article 16 in the Law for Occupational Safety and Health (LOSH) when it affirms, «*if the results of the assessment predicted in paragraph a) bring up the risk based situations, the employer will carry out the necessary preventive measures to eliminate, or reduce the aforementioned risks. Such activities will be the subject of planning by the employer,* ***including for each***

9 Lara, A. (2013). Algunas orientaciones para evaluar los factores de riesgo psicosocial. http://www.insht.es/portal/site/Insht/menuitem.1f1a3bc79ab34c578c2e8884060961ca/?vgnextoid=bfecbd1b4b38e310VgnVCM1000008130110aRCRD&vgnextchannel=9f164a7f8a651110VgnVCM100000dc0ca8c0RCRD

given activity the necessary time frame for it to be carried out, designation of those responsible and the human resources and materials required for its execution…»(the bold type is ours).

The final phase «FOLLOW UP AND CONTROL OF THE ADOPTED MEASURES« has its roots in the already cited article 16 of the LOSH, where it affirms, «*the employer must make sure of the* ***effective execution*** *of the preventive actions included in the planning, using for this a* ***continuous follow up on the aforementioned actions****.*

The preventive actions should be modified when the employer sees, as a result of the periodic controls set out in paragraph) before they fail to reach the required protection» (the bold type is ours). More information on these final two stages can be found in Vega (2009)[10] and Lara (2013).

Given how the INSHT understands the process of psychosocial assessment, and within this operating process, the INSHT has developed a well know assessment tool FPSICO, which now is on its version 3 (at the time of writing, intense work is being carried out on a version 3.1).

FPSICO first appeared in 1994. Subsequently, in 2005, a new version of the software application was edited, and in 2011, after the mandatory study of its psychometric properties[11] was carried out, the most recent version came out (its main characteristics will soon be explained). As of today, it can be said that it is one of the most well-known «methods» of assessment used in Spain. Although, at this moment it is difficult to give precise information regarding its usage, it is worth noting a few clues: in a recent survey carried out by OSALAN[12] -The Basque Institute for Safety and Health at Work – with the aim of quantifying the situation regarding psychosocial risks in the Basque Country, the data showed that *«the methodology most commonly used is the quantitative one, the method used by the INSHT, FPSICO, being the most frequent«* (shown by 67% of those surveyed). Also, although it is still early to draw precise conclusions from the data found in the SERPA[13], the

10 Vega, S. (Coor.) (2009). Experiencias en intervención psicosocial. Más allá de la evaluación del riesgo. Barcelona: Instituto Nacional de Seguridad e Higiene en el Trabajo.

11 http://www.insht.es/InshtWeb/Contenidos/Documentacion/NOVEDADES%20EDITORIALES/FPsico/Informe%20justificación.pdf

12 Romero, D., Gómez, M. & Alastruey, J.C. (2012). Mapa de situación de la prevención de los riesgos psicosociales y propuesta de actuación. OSALAN. Available at http://www.osalan.euskadi.net/s94-osa0010/es/contenidos/informacion/mapa_psicosociales/es_mapa/adjuntos/mapa_psicosociales.pdf

13 Software application developed, managed and maintained by the Ministry of Employment and Social Security, that acts as a support for the general data base of prevention services and where all the recorded data is collected from the regional communities.

first analyses also tend to indicate the same line in that FPSICO is the method of psychosocial assessment most commonly used within Spain.

We are now going to focus on the main characteristics of the latest version of FPSICO and on the main changes that have occurred between versions 2 and 3[14]. For example, a conceptual update taking into account several theoretical models such as the demand-control-social support model of Karasek and others or the effort-reward imbalance of Siegrist; increasing the number of studied factors, moving from seven to nine (work time, autonomy, work load, psychological demands, variety/content, participation/supervision, interest on behalf of the worker, carrying out of the role, relationships and social support); the inclusion of several items referred to as the possible exposure to conflict or violent behavior; incorporation of two help files in the collection of data, one of «identification of previous conditions» and the other «effects on the organization«, that act as an aid in working out the definition of the analysis units and interpretation of the results; possibility to use a computerized format as well as the traditional paper based one; establishment of four risk levels according to population grouping; increase in the amount of information given by the software application, both as a measure of central tendency -mean and median- and of dispersion –normal deviation-;intervention proposals for each of the evaluated factors and the relevant tools to facilitate it-files to organize the information-; etc.

Also, the INSHT, aware of the continuous need to improve the products offered to society in general, keeps an open channel of communication to receive any suggestions to improve the prevention software application: cnctfpsico30@insht.meyss.es.
The INSHT also counts on various evaluative tools, that whilst not specific in nature, do take into account these type of risks. We can see two examples. The «*Manual for the assessment and prevention of ergonomic and psychosocial risks in small and medium sized enterprises*»[15], edited by the INSHT and the Valencian Institute of Biomechanics, is a straightforward assessment procedure made up of two parts: 1. Initial identification lists (that is not an assessment tool in itself); 2. Assessment methods. In the identification lists, aspects such as mental work load and psychosocial factors are considered, whereas in the assessment methods more focus is given to aspects related to the demands of the task, control of the work, temporary autonomy, work content, supervision-participation, definition of the role, interest on behalf of the worker, personal relationships, shift and night work. Meanwhile, the «*Practical methodology for*

14 Both versions available at: http://www.insht.es/portal/site/Insht/menuitem.1f1a3bc79ab34c578c2e8884060961ca/?vgnextoid=cddc31dd88ca0310VgnVCM1000008130110aRCRD&vgnextchannel=9f164a7f8a651110VgnVCM100000dc0ca8c0RCRD

15 http://www.insht.es/portal/site/Insht/menuitem.1f1a3bc79ab34c578c2e8884060961ca/?vgnextoid=c4e4683412786110VgnVCM100000dc0ca8c0RCRD&vgnextchannel=1d19bf04b6a03110VgnVCM100000dc0ca8c0RCRD

the assessment of working conditions in small and medium sized enterprises»[16] evaluates aspects related to mentalwork load, organization factors and shiftwork.

These are just some of the initiatives of the INSHT in carrying out generic assessments of psychosocial factors (first level -methods-, in the terminology of Meliá, Nogareda, Lahera, Duro,Peiró, Salanovay Gracia, 2006[17]).

The INSHT also facilitates information on other risk assessment tools with similar characteristics to that of FPSICO. For example the NTP 703 and 840 summarize the most relevant characteristics of COPSOQ (ISTAS21, PSQCAT21) and the method «Psychosocial Factors. Identification of risk factors«(INSL), respectively.

As well as this, certain assessment procedures have been designed in order to evaluate certain specific risks. For example, the NTP 574 on stress in the teaching profession[18] presents a questionnaire to identify and score stress triggers in this group. From this same collection the INSHT, also offers information on burnout through the Spanish adaptation of the MBI-GS developed by the research team WoNT from the Universitat Jaume I de Castellón[19], or to evaluate psychological harassment in the workplace via the Triangular Harassment Analysis System (SATA)[20], developed by the Professional Association of Psychology of Western Andalusia.

We conclude this section outlining certain recent projects of the INSHT on psychosocial assessment-as well as the aforementioned development of FPSICO3.0.

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16 http://www.insht.es/portal/site/Insht/menuitem.1f1a3bc79ab34c578c2e8884060961ca/?vgnextoid=ad6c41941b086110VgnVCM100000dc0ca8c0RCRD&vgnextchannel=1d19bf04b6a03110VgnVCM100000dc0ca8c0RCRD

17 Meliá, J.L., Nogareda, C., Lahera, M., Duro, A., Peiró, J.M., Salanova, M. & Gracia, D. (2006). Principios Comunes para la Evaluación de los Riesgos Psicosociales en la Empresa. In Foment del Treball Nacional (Ed.), *Perspectivas de Intervención en Riesgos Psicosociales. Evaluación de Riesgos* (pp. 13-36). Barcelona: Foment del Treball Nacional.

18 Nogareda, S. (2000). *NTP 574: Estrés en el colectivo docente: metodología para su evaluación*. Barcelona: Instituto Nacional de Seguridad e Higiene en el Trabajo. Available at http://www.insht.es/InshtWeb/Contenidos/Documentacion/FichasTecnicas/NTP/Ficheros/501a600/ntp_574.pdf

19 Bresó, E., Salanova, M., Schaufeli, W. &Nogareda, C. (2006). *NTP 732: Síndrome de estar quemado por el trabajo Burnout (III): Instrumento de medición*. Barcelona: Instituto Nacional de Seguridad e Higiene en el Trabajo. Available at http://www.insht.es/InshtWeb/Contenidos/Documentacion/FichasTecnicas/NTP/Ficheros/701a750/ntp_732.pdf

20 Sebastián, M.L. & Fidalgo, M. (2009). *NTP 823: Sistema de Análisis Triangular del Acoso (SATA): un método de análisis del acoso psicológico en el trabajo*. Barcelona: Instituto Nacional de Seguridad e Higiene en el Trabajo. Available at http://www.insht.es/InshtWeb/Contenidos/Documentacion/FichasTecnicas/NTP/Ficheros/821a921/823%20web.pdf

The project Ergo 10-03 METEI had as its main objective *to determine the suitability of the various methods, techniques and tools applicable in assessing psychosocial risk factors.* Due to this, it was possible to review a number of very diverse assessments and materials that lead to various articles[21], informative documents[22], training programs on methods of assessment, lectures in technical and other similar workshops. In short, carry out a study of future possibilities based on current indicators (prospective).

The project PSICO 13-01 ORIENTA-currently in progress- aims to *provide uniform guidelines of action to the specialized technicians in applied psychosociology in order to develop the assessments of psychosocial risk factors.* It uses as a reference the previous project and will be a further step in this line of work.

5. Reflection and future trends.

Currently, in the world of psychosociology, we can find certain deficiencies, both in recently adopted practices, as well as others that had to be taken on, that need to be corrected. One of the obstacles to this is the fact that there are very few specific indicators of psychosocial activity, as the majority of existing work also contains ergonomic information. Thus, the implementation of mandate TIN/2504/2010 of the 20 September (BOE number 235 of the 28 September 2010) will lead to a greater specific knowledge of psychosocial activity (disassociated from ergonomics) developed within Spain.

Article 5 of this mandate regarding the characteristics of the reports of the specialized bodies accredited as external prevention services(SPA) states that *«the annual report of the specialized bodies accredited as external prevention services, outlined in article 20.2 of the Regulation of Prevention Services, must include the contents and data specified in Annex III.*

To this end, the annual report will show, in separate form, data relating to the global actions of prevention services, according to that shown in part A of annexIII, and data referring to specific actions undertaken by each company and place of work where preventive actions are carried out by the specialized entity, as shown in part B of annex III».

21 Lara, A. (2010). Algunos errores en las evaluaciones de riesgo psicosocial. Seguridad y Salud en el Trabajo, 58, 28-33. Available at http://issuu.com/lamina/docs/sstjulio2010?mode=embed&layout=http%3A%2F%2Fskin.issuu.com%2Fv%2Flight%2Flayout.xml&showFlipBtn=true

22 Lara, A. (2013). *Algunas orientaciones para evaluar los factores de riesgo psicosocial*. Madrid: Instituto Nacional de Seguridad e Higiene en el Trabajo.

In short, and in relation to data provided by SPA regarding psychosocial risk assessments carried out in enterprises: number of enterprises, number of workers affected and number of hours/year spent (annex III part A) and more specifically with regard to assessment methods used, number of workers affected and number of hours/year spent (annex III part B). With regard to joint prevention services (SPM), the information is similar (annex IV part A and part B).

Another relevant aspect and driving force is to make room for psychosocial risks in the different Strategies, Master Plans, Plans of Action, etc. on Safety and Health at Work that are carried out by the Public Administration, both at a regional and national level. In this sense, favoring an increase in the support given to the small and medium sized enterprise so that they can manage more efficiently these types of risks, including the improvement of the assessments that need to be made.

It is also crucial to improve the training of the different groups involved in OSH. Thus, and related to technical personnel, it is important to improve their skills in the different procedures, techniques and current tools of psychosocial assessment, taking into account sufficient criteria to be able to choose the best tools in each specific case.

In another vein, some of the aforementioned conclusions and data cited in *«Situational map of psychosocial risk prevention and action plan»* could be extrapolated to the rest of the country. In line with the psychosocial risk assessments (ERP), it is worth pointing out that:

- Of the total number of «centers» that formed part of the study, the ERP had only been carried out in 5, 01% of them.
- Of the total number of «workers«that formed part of the study, the number of those that had carried out an ERP was 12,8%.
- The carrying out of ERP is far more frequent in «centers» that have SPP or SPM instead of SPA.
- It is more frequent in the «service«sector, followed closely by «industry» and far behind by «construction« and «primary».

In short, the number of ERP that are carried out is low. The sector where they are carried out most frequently is «services«; centers with SPP and SPM carry out ERP at a higher percentage than centers with SPA.

With regard to «methods«ofassessment certain lines of development can be suggested. One of these could be the search for a greater adaptability and modular adaptation of these types of test, another being the creation and improvement of criteria tests.

We can conclude this text by reflecting on the fact that in no way should the psychosocial assessment become an activity that once carried out, should then be forgotten about. The assessment of psychosocial risks, as with the rest of labour aspects related to the health of the workers, should be a continuous and systematic process (article 16 of the LPRL).

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3

Good practices observatory

CANADA

CAN/CSA-Z1003-13/BNQ 9700-803/201-PSYCHOLOGICAL HEALTH AND SAFETY IN THE WORKPLACE: OVERVIEW

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It's one of the top reasons for disability claims, absenteeism and lost productivity. It affects one in five Canadians, mostly in their prime working years, and has a major impact on workplaces and the bottom line. Mental illness is something businesses cannot afford to ignore. With 20 per cent of Canadians dealing with mental health problems at some point in their lives, reducing stigma in the workplace and ensuring there are policies to support them and their co-workers is critical. Bringing mental health into the open in offices, plants and other work sites is necessary to change both attitudes and company policies.

Mental illness is also the fastest-growing reason for short- and long-term disability claims, accounting for about 30 per cent in Canada and costing business $6 billion in lost productivity and absenteeism in 2011, according to the mental health commission. In its national strategy last May 2013, the commission listed new health and safety standards among its key recommendations.

Now, for the first time, Canadian companies have a standardized tool to help them tackle the issue by creating workplaces that promote mental health, reduce stress and support employees dealing with mental illness. The new national standard for workplace mental health and safety, released by a partnership of federal and business leaders, is a framework that can be adapted for large and small organizations (Mental Health Commission of Canada).This voluntary standard is the first of its kind in the world. The project was funded by the Federal Government, Bell Canada and Great-West Life Centre for Mental Health in the Workplace.

The Mental Health Commission developed the standard, called *Psychological Health and Safety in the Workplace*[1], in collaboration with the Bureau de normalization du Quebec and the non-profit association CSA Group after years of consultation with business, unions and mental health experts. The new standard — which is free and available by download — has guidelines to help companies identify potential hazards to mental health and where they can improve policies and practices.

The new standard allows organizations to analyze their own workplaces to assess and control risks associated with organizational changes and job demands, introduce practices to support psychological well-being and review how well policies and approaches are working[2]. It is a significant step forward at a time when corporate downsizing,

1 CAN/CSA-Z1003-13/BNQ 9700-803/2013.*Psychological health and safety in the workplace - Prevention, promotion, and guidance to staged implementatio.*

2 Companies that quickly announced they will adopt the guidelines on Wednesday included the Centre for Addiction and Mental Health

increased workloads and global competition are leading to stress and anxiety for many employees. A psychologically healthy and safe workplace has been defined in the National Standard of Canada on Psychological Health and Safety in the Workplace as:

> «…a workplace that promotes workers' psychological well-being and actively works to prevent harm to worker psychological health, including in negligent, reckless or intentional ways».

CAN/CSA-Z1003-13/BNQ 9700-803/2013, Psychological Health and Safety in the Workplace is a voluntary standard intended to provide systematic guidelines for Canadian employers that will help enable them to develop and continuously improve psychologically safe and healthy work environments for their employees. A significant amount of material was reviewed in the development of this standard. It aligns with and follows the Plan-Do-Check-Act management systems model found in CAN/CSA Z1000, Occupational Health and Safety Management, to enable integration of a Psychological Health and Safety management system into the way the organization manages its business.

Some organizations offer management systems of mental health inthe workplace. A good example is the Centre for Mental Health in the Workplace. The free resources found in this *Psychological Heath and Safety Management System (PHSMS)* section are aligned with the Standard and part of collaboration with researchers, academics, practitioners, non-profits and forward-thinking organizations[3]. The PHSMS sections are organized around the following Standard clauses:

- Commitment and Leadership.
- Planning.
- Implementation.
- Evaluation and Corrective Action.
- Management Review and Continual Improvement.

A PHSMS is similar to other management systems and can be integrated with existing policies and processes. A PHSMS does not need to involve a significant investment, or a complete change in processes, policies or procedures.

(CAMH) Centre for Addiction and Mental Health (CAMH) in Toronto, Bell Canada and national consulting firm Morneau Shepell.

3 http://www.gwlcentreformentalhealth.com/

A PHSMS can be approached in a step-wise fashion by:

- Assessing where your organization is now using available measurements.
- Deciding where your organization wants to be in terms of psychological health and safety.
- Selecting actions that will help your organization to get there.
- Implementing, at least initially, what is prudent or practical given your organization's current circumstances.

It also aligns with other key standards and guidelines, including BNQ 9700-800 on Healthy Enterprises, CSA Z1002 on OHS Hazard Identification and Elimination and Risk Assessment and Control, *BSA PAS 1010 Guidance on the Management of Psychosocial Risks in the Workplace*, and Guarding Minds @ Work.

Key topics covered in the standard include[4]:

- Establishing commitment, leadership and participation.
- Understanding the diverse needs of the organization's population so they can be appropriately addressed.
- Maintaining confidentiality.
- Establishing a policy and planning process to implement the system.
- Identifying the organization's PHS hazards, assessing risks, and implementing preventive and protective measures.
- Ensuring infrastructure and resources are in place to support the system.
- Providing education and awareness.
- Having processes in place to be prepared in the case of a critical event.
- Collecting data, monitoring and measuring success.

4 http://shop.csa.ca/en/canada/occupational-health-and-safety-management/cancsa-z1003-13bnq-9700-8032013/invt/z10032013/?utm_source=redirect&utm_medium=vanity&utm_content=folder&utm_campaign=z1003

This standard is a journey of continual improvement. One of its unique aspects is the inclusion of several annexes designed to assist the user with applying the standard. These include the following:

A. Background and context.
B. Resources for building a psychological health and safety framework.
C. Sample implementation models.
D. Implementation scenarios for small and large organizations.
E. Sample audit tool.
F. A discussion of relevant legislation or regulation (as of September 2011).
G. Related standards and reference documents.