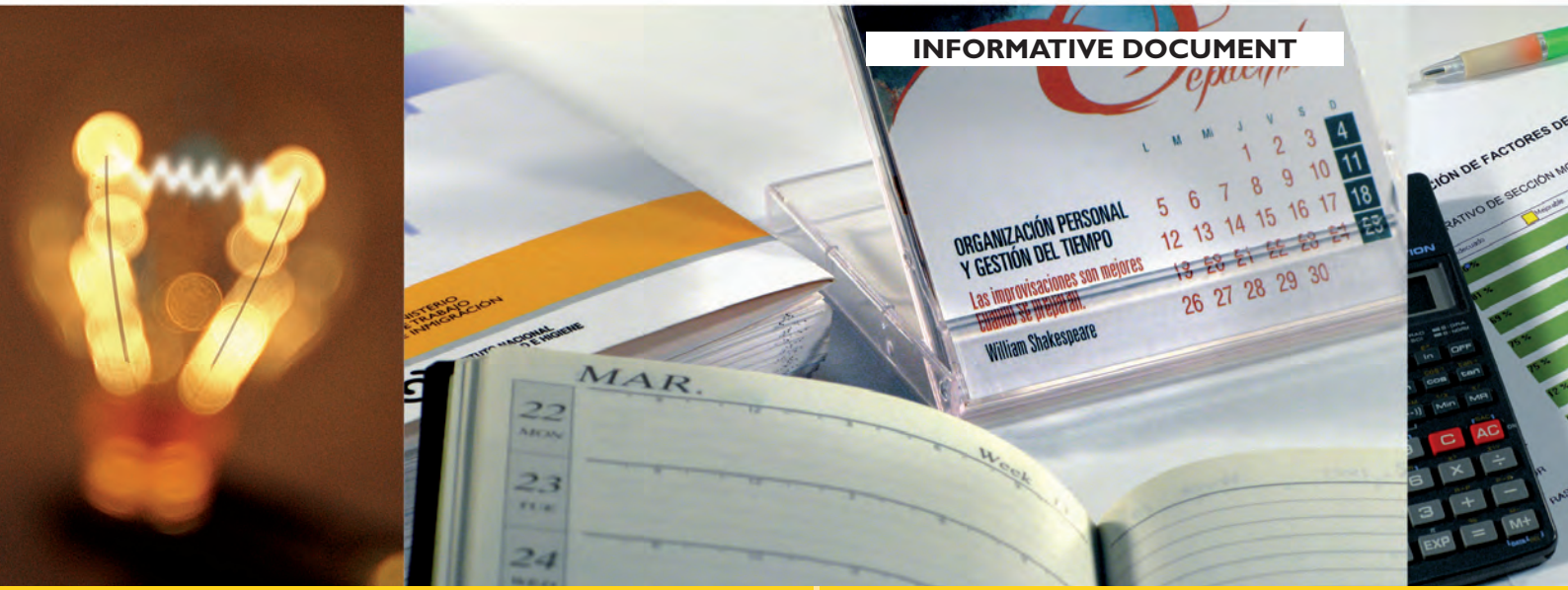
Some guidelines for assessing psychosocial risk factors

(extended edition 2015)



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Some guidelines for assessing psychosocial risk factors (extended edition 2015)

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The use in the Spanish version of this publication of the masculine plural when referring to women and men as a collective has no discriminatory intention whatsoever, but rather is the application of the linguistic law of expressive economy which facilitates reading with the least possible effort.

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LIST OF ABBREVIATIONS

PHW	Psychological Harassment in the Workplace
EU-OSHA	European Agency for Safety and Health at Work
HSE	Health and Safety Executive
INSHT	Instituto Nacional de Seguridad e Higiene en el Trabajo (National Institute of Safety and Health at Work)
INSL	Instituto Navarro de Salud Laboral (Navarran Institute of Work Health) (at present, Instituto de Salud Pública y Laboral de Navarra (Institute of Public and Work Health of Navarre), ISPLN)
ISTA	Instituto Sindical de Trabajo, Ambiente y Salud (Union Institute of Work, Environment and Health)
LSSI	Labour and Social Security Inspectorate
LPOR	Ley de Prevención de Riesgos Laborales (Law on Prevention of Occupational Risks)
TNP	Technical Note on Prevention
POR	Prevention of Occupational Risks
PSR	Preventive Services Regulations
UA	Unit of Analysis

1. INTRODUCTION

Quoting the final reflection of the last edition, *both regarding the questions included and the guidelines given, one could say that <<not all which matter are listed, but all which are listed matter>>. When <<concluding>> the draft of a text such as this, one always doubts what other issues might have been included, and what other guidelines might have been issued. But this question, asked once and again, could then become a tautology and result in a work always on the verge of being finished but which will never see the light. This way, there is always a day when one makes the decision of concluding the draft and expects that any new issues that may arise, either as questions or as answers, may see the light as a second part (ignoring the saying that <<sequels are never any good>>), an article, a paper, a brief guide… time will tell*. Well, time has given its judgement and here you are an extended edition of that first work. Here you will find the same questions and answers which appeared in the first edition –with the relevant extensions and updating of bibliographical references and web links– plus a set of new questions and answers.

The expertise in the field of research and technical assistance developed from the Technical Units of the National Institute of Safety and Health at Work (INSHT) (Spain) linked to the area of Psychosociology, within the research framework of the "ORIENTA" project (10.11.01.15.CNNT.2014), added to by the co-operation of leading experts in the occupational psychosocial area, has given rise to this document.

To prepare it, we undertook the following actions and consulted the following sources of information:

- Review of the queries addressed to the INSHT regarding psychosocial issues in the last few years, specially relating to the assessment of psychosocial factors.
- Consultation of the Frequently Asked Questions sections in different web pages devoted to the Prevention of Occupational Risks (POR) and dedicated publications.
- Consultation and study of different books, reports, monographs, articles, etc., which the reader will be able to find referenced throughout the text.

- Compilation of frequently psychosocial questions posed to the authors and contributors of this document in different courses, seminars, workshops, lectures, etc.
- Visit/consultation to different bodies related to some of the questions asked.
- Interview with prevention technicians specialised in certain subjects.

Finally, we should point out two features of this document. The former relates to the scope of application of the contents that will appear. In this regard, we basically, although not exclusively, considered the generic evaluations of psychosocial factors (or those which use first level "methods", according to the terminology forged by Meliá, Nogareda, Lahera, Duro, Peiró, Salanova and Gracia, 2006).

The latter feature to point out deals with two words included in the title. The first one relates to why we use the word "some". We are aware that the proposals offered are not covered by those presented in this work, as the multiplicity of organisations and ways of being organised, types of jobs, activities performed, etc., result in having to study on a case by case basis what the most suitable assessment strategy is, in spite of the fact that there are some more or less fixed action patterns to assess psychosocial factors. The second word is "guideline" (*orientación*, in Spanish. According to the twenty third edition of Dictionary of the Spanish Language (Diccionario de la Lengua Española, http://www.rae.es), to guide is "*to provide someone with information or advice in relation to a certain target*". Therefore, we simply intend to provide information on the way to address some frequent questions in this field and what the state of affairs currently is.

2. SOME GUIDELINES FOR ASSESSING PSYCHOSOCIAL RISK FACTORS

In order not to make a simple list of questions and answers, they have been categorised according to what stage of the evaluation process is basically –although not exclusively– affected; i.e., some questions and their corresponding answers could be included in more than one stage. These stages are those referred to in the Technical Note on Prevention (TNP) number 702 published by the INSHT (2005). Let's remember them (figure 1):

- Identifying risk factors.
- Choosing the methodology, techniques and instruments to be applied.
- Planning and performing the field work.
- Analysing the results and preparing a report.
- Devising and implementing an intervention programme.
- Follow-up and control of the actions taken.

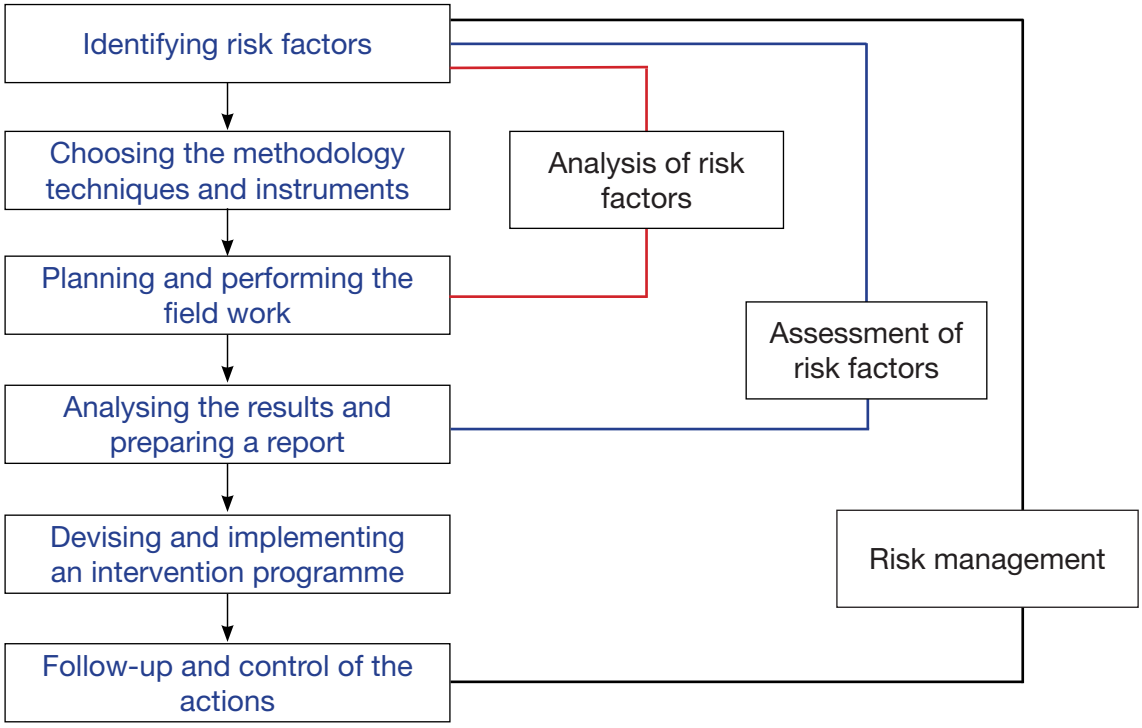


Figure 1. Stages of the evaluation process

Other more generic issues that affect, wholly or partly, the assessment process, shall be dealt with in chapter three.

Stage 1. Identifying risk factors

The psychosocial risk factors comprise a broad spectrum of factors. This does not mean that all of them are always present in every job. For example, an isolated job shall not be affected by risk factors arising from the interaction with other members of the workforce or clients, patients, passengers, etc. However, it will have other risk factors linked to the performance of the relevant work in isolation and the lack of communication (Meliá et al., 2006). For this reason, **at this stage we need to define and delimit in the most accurate and least ambiguous way the factor or factors to be researched** and their different aspects or facets (National Institute of Safety and Health at Work, 2005).

In order to start from detailed knowledge of the situation that may help define the aspects to be assessed, we should try and collect all the information possible to guide us in this pursuit. For this purpose, sometimes it is advisable at this stage to apply loosely structured techniques of information collection (semi-scripted interviews, loosely structured observation, discussion groups, etc.) (see figure 2).

Sources of information (a non-exhaustive list):

- **Opinion of all the social groups** involved.
- **Observing the work** while it is being undertaken.
- **Record of potential tensions and "deviations"** between the theoretical work procedures and the real procedures.
- **Documents, statistics and reports** that may contribute information and may be related to the topic:
  - **General details of the company**: age, organisational chart, systems of working hours, wages, promotion, etc.
  - **Staff features**: gender, age, years of service in the company and in the particular job, etc.
  - **Different aspects affecting the staff:** absenteeism, diseases, training, accident rate, staff rotation, applications for job change, penalties, etc.
  - **Different aspects affecting production**: production quality, refusals, production rates, maintenance interventions, breakdowns, etc.
  - **Minutes and reports** by the works council, the health and safety committee, the prevention service, etc.
  - **Consultation of other existing studies, theories and knowledge** related to the subject.

Figure 2. Sources of information (adapted from the National Institute of Safety and Health at Work, 2005).

Some questions that usually arise at this stage of the initial approach deal with: using information organisation or support tools specific for this stage; shaping the future units of analysis (UA); the population/ sample issue; etc. Let's see them.

Is there a standard list of questions, factors (demand, control, working times, role performance…), that may help prepare a script for preliminary interview, some first categories of observation... something that may provide for global guidance?

As of today, we have a very large number of publications and quality web pages which may be useful. To name but a few of them (a non-exhaustive list):

- Factsheet 31 by the European Agency for Safety and Health at Work -EU-OSHA- (2002) includes a simple questionnaire intended to ascertain whether there might be a work-related

stress problem at the workplace. The questions are sorted into classical study dimensions in this field, such as requirements/demands, control, support, etc. Please bear in mind that this is not a validated or assessed tool, but rather a mere compilation of questions.

- Another interesting EU-OSHA publication is the one by Cox, Griffiths and Rial-González (2005). It includes 10 potentially dangerous psychosocial features of work, sorting them according to their relationship with work context or content.
- The EU-OSHA publication entitled "Risk assessment essentials" (2007) also includes some interesting lists to establish the existence of certain dangers in workplaces.
- The EU-OSHA campaign "Healthy workplaces. Manage stress" (http://hw2014.healthy-workplaces.eu/en?set_language=en), developed in 2014 and 2015, contains a large amount of information.
- The control lists by the European Foundation for the Improvement of Living and Working Conditions (Kompier and Levi, 1995).
- Different materials performed under the "Psychosocial Risk Assessments" European inspection campaign, implemented in 2012 by the Committee of Senior Labour Inspectors (SLIC) (available at http://www.av.se/SLIC2012/spanish.aspx).
- The publication entitled Labour and Social Security Inspectorate Action Guide on Psychosocial Risks ("Guía de Actuaciones de la Inspección de Trabajo y Seguridad Social sobre Riesgos Psicosociales"), by the Labour and Social Security Inspectorate (LSSI) (2012), a guide drafted following the guidelines of the aforementioned SLIC campaign which also includes relevant information.
- The information included in Psychosociology and Ergonomics dedicated web pages by the INSHT (http://www.insht.es).
- The analysis of impact indicators on people and the productive process included in the guide entitled "Ergonomía: Pautas de actuación. Guía para la realización de evaluaciones ergonómicas y psicosociales" (Ergonomics: Action Guidelines. A guide to undertaking ergonomic and psychosocial assessments) (Sebastián, 2008).

- Numerous general and sector-specific publications prepared by union and corporate organisations, associations, professional organisations, labour health institutions or similar bodies in autonomous communities, and a long list of other publications (many of them available on the Internet).

In sum, and in addition to the information that may be compiled by direct observation, it is extremely useful at this early stage to ask employees to openly describe, in their own words those work situations and experiences that may cause major concern (Ortiz, 2012).

After defining the set of factors upon which the study would focus, and starting from the data previously collected, we may also specify which work centre(s), department(s), etc., will be analysed, a feature included between the first and second stages (National Institute of Safety and Health at Work, 2005). Questions such as the following would then arise:

How are the units of analysis shaped? What might be the guiding criteria?

The CoPsoQ-istas 21 method, version 2, manual (Moncada, Llorens, Andrés, Moreno and Molinero, 2014) establishes some criteria to define the basic UA that we deem interesting and that can be extrapolated to the use of other assessment procedures (emphasis in bold letters added):

Jobs are basic units of analysis but usually, from a psychosocial standpoint, not all of them need to be treated separately, either for operational reasons when there are too many, or for anonymity reasons. In order to group them, the working group shall consider three criteria. ***The first one is people management****: you cannot combine two positions when one involves directing people and the other does not whilst you may, for instance, combine different positions of intermediate managers even when there is a difference of hierarchical level between them.* ***The second one is the margin of***

***autonomy when performing tasks**: you cannot combine positions with different decision-making possibilities when performing tasks; for example, nobody tells a mechanic how to fix a machine, but machine operators do not decide how to perform the movement they make to match the part they receive with the one they have; cashiers do not even decide how they address customers, but computer technicians program with the system of their choice. **The third one is the nature of the task**: for example, you cannot combine a mechanic's job with a clerical position, as the relevant tasks are completely different; however, we may combine a human resources administrative position with a warehouse administrative position, as the tasks they perform are similar.*

The basic division of occupations may be useful to guide the grouping of positions: directors, managers, technicians, administrative personnel, skilled workers, unskilled workers (but attention: this terminology should never be used, but rather the relevant job names in the company, so that everybody may be able to identify their job) (page 64).

Obviously, these are not the only criteria to be taken into account to create the UA. Other criteria, such as the fact that a certain UA may not be so small so as to put anonymity at risk, or to consider the fact that sometimes the global results of an organisation may cover up relevant data pertaining to more specific positions/departments/age groups..., or other particularly interesting variables in each organisation, may also determine the decisions made as to which UA to shape (see also point 3.2.a.2. of Labour and Social Security Inspectorate, 2012 or Lucas, 2008, page 74).

In any event, please bear in mind that more is not necessarily better. The UAs should be those strictly required to meet the assessment targets.

Finally, and as regards the specific values or modalities that make up a UA, we should remember two essential properties: they must be exhaustive and mutually exclusive or incompatible; i.e., the different UA values should cover every possibility available and should also be disjointed (García, 2008). Regarding the former property, exhaustive means that no respondent may be left out of the categorisation

made in a unit of analysis. For example, if the "job" unit of analysis is defined, establishing the modalities or values of "clerical staff", "administrative personnel", "technician" and "manager", if someone had a job termed as "driver", there would be no possibility of marking any option. Regarding the latter property, being mutually exclusive means that one may not belong to two different UA values. Following on with the example above, if the possibility existed of someone marking the "clerical staff" and "administrative personnel" options because they covered both jobs, this would mean that there is an error in the modalities of the said UA, and a new modality to contemplate this event would need to be created.

In ordinary practice we have been able to see how neglecting this type of event entails the subsequent loss of capability of data analysis.

When assessing psychosocial factors, should we include the whole working population, or can we sample?

Meliá et al. (2006) comment, in this regard, that *in quantitative methodologies (those which use tools such as questionnaires) in small and medium-sized companies we should apply the tool(s) to every worker. Beyond a certain company size, it may be advisable, for technical and data quality reasons, to apply sampling techniques and to establish the sample sizes of every group to be analysed by means of suitable statistical formulae according to the technically appropriate sampling error level. Establishing the sample size, as the case may be, is a technical issue. In qualitative methodologies (for example, interviews) we should establish the choice of people who will take part. In companies of a certain size we should establish the choice of people who will take part according to representativeness and interest for the study criteria. As described above, according to the Preventive Services Regulations we should collect information to assess and adopt preventative measures. In order to collect this information, we need not consult every worker, but we need to establish the most suitable means or techniques in order to have as much information as possible about the psychosocial working conditions or the psychosocial risk factors* (page 27).

The extinct "Psychosocial factors. Identification of risk situations" assessment procedure of the Instituto Navarro de Salud Laboral (Navarran Institute of Work Health (INSL, currently the Instituto de Salud Pública y Laboral de Navarra (Navarran Institute of Public and Work Health)) contended, along similar lines, that *the test should be filled in by 100% of the staff. If this is not possible, we recommend carrying out a sample taking into account the diversity of the existing jobs and choosing a sample which statistically represents each and every work condition present in the organisation. The units of analysis and the submission of results should be of such a size that ensures at all times anonymity and confidentiality of the answers given* (National Institute of Safety and Health at Work, 2009a, page 2). The INERMAP "methodology" also argues along the same line (Gracia, 2006).

There are other positions which are slightly different to the ones above. For example, Niño (2006) states that *the etiological character of an assessment of psychosocial risks makes it necessary to provide the opportunity of giving the surveys to all people or employees, of interviewing every prevention delegate and every company interlocutor appointed, and not only a sample of them, however representative it may be considered for an epidemiological study. Risk assessment based only on sampling statistical or epidemiological study, limited to the comparison of the psychosocial situation of the positions in a company or department in relation to a situation of reference, shall never be the «study of objectivation and assessment of the working conditions» of every job, which should be a risk assessment* (page 40); or Martínez-Losa (2006), who dismisses sampling when collecting quantitative data, but deems it a must to collect qualitative data.

To sum up and apart from potential statistical disquisitions in this regard, the general line is that, if we can include the whole working population, the best option is not sampling (the LSSI guide makes the same recommendation). Please bear in mind that answering a questionnaire or scale, interview, etc. is a voluntary act, and this in itself makes for cases to be lost. We should also take into account that what may initially seem an advantage also has its drawbacks such as, for example, designing and having a replacement sample. In addition, taking part is motivating and provides for subsequent involvement, when preventative measures have to be developed (psychosocial intervention). Nevertheless, realistically, certain organisations have

certain features such as, for example, their large volume of the workforce, their wide geographical dispersion, etc., that make including the whole working population a virtually unapproachable technical task, so that sampling could be advisable, for operational reasons, in this type of situations. In that case, sampling must be well performed (see National Institute of Safety and Health at Work, 1991; Manzano, 1998; Moncada et al., 2014) and truly representative of the variety of jobs and situations that may exist in any organisation.

What is the minimum number of workers in an organisation that would allow for questionnaires or scales to be used as assessment tools?

Without any pretension of being exhaustive, let us see the information provided in this regard by some of the best known assessment procedures which use this type of tools.

FPSICO 3.1 (National Institute of Safety and Health at Work, 2014) states, in this regard, in the section entitled *Basic instructions for proper use of the method,* that even when individual and collective results may be obtained, it is not advisable to use individualised data. This is so for reasons such as the nature of the data obtained, deontological reasons, etc. Therefore, it establishes as a minimum unit of analysis the department, professional category, etc.; i.e., it does not establish a specific minimum, but makes clear that there needs to be a set of a sufficiently large number of cases so as not to correlate the answers to a specific questionnaire with a specific person.

The INSL assessment procedure submitted that *as a measure to ensure the anonymity of the answers given, it is recommended for use in companies or organisations that have at least ten employees, although its use on a smaller scale is not discouraged, provided that the confidentiality of the data obtained is guaranteed and results are globally presented* (National Institute of Safety and Health at Work, 2009a, page 1). That is to say, a minimum organisation size is recommended in this case, although it did not prohibit using it in smaller ones provided certain guarantees were ensured.

All in all, in spite of the fact that this type of assessment procedures do not rule out using this type of tools in small companies (even some of them, such as ISTAS, have created specific versions for this type of organisation), current state of the art points to the fact that the assessment of psychosocial factors in this type of organisations may also be approached in different terms (Gabinete de Prevención, Calidad y Medio Ambiente de la Confederación de Asociaciones Empresariales de Baleares (Prevention, Quality and Environment Office of the Confederation of Business Associations of the Balearic Islands), 2009; Labour and Social Security Inspectorate, 2012). For example, Guàrdia and Peró (2010), when referring to qualitative records, or Sebastián (2008), mentioning some considerations regarding psychosocial assessments, commented that it could be much more interesting, in small companies, to do without questionnaires and to use techniques that involve qualitative data (which means that whoever administers these techniques needs to be very well trained, with even more training than that required to apply questionnaires, batteries or scales. According to the guide issued by the Labour and Social Security Inspectorate (2012) *its implementation requires specific professional training* (page 25).

Stage 2. Choosing the methodology, techniques and instruments to be applied

Once we have enough or at least initial information about what factors would need to be studied, what are the general features of the organisation that determine certain working conditions, what units of analysis should be taken into account so as to later have more detailed information than that offered by the general profile, etc., doubts will frequently arise, such as: which assessment procedure, technique or tool to use; the possibility to make an ad hoc modification of a standard "method"; the feasibility of using qualitative techniques; simultaneous use of various assessment "methods", techniques or tools, etc. Let us explore these fields in detail.

Of the different existing "methods" or procedures, techniques and tools, what criteria may be useful for comparison purposes and to choose the best one for the specific assessment to be performed?

The choice shall depend above all on the specific factors to be assessed (National Institute of Safety and Health at Work, 2005), but also on the answer to a series of conditions, such as the following:

- The goals pursued according to the specific type of assessment.
- The features of the group (if it has a low or high educational level; how difficult or easy it is to gather them all; their reading and writing skills, etc.).

- If the type(s) of tools to be applied have been used on previous occasions to perform other studies (for example, in organisations where every year employees answer systematically three or four questionnaires about the work environment, organisational culture, etc., but subsequently receive no information about the outcome or the steps taken for improvement, the use of questionnaires or scales may not be the most appropriate as they are already "burnt", with the consequent risk of having a very low response rate).
- The degree of rigour and quality (in terms of validity) that we will be offered (Pérez, Rojas and Fernández, 1998).
- The real possibility of development (Pérez et al., 1998):

    - Access to sources of information. On occasions, we make a decision to use a specific "method", and when we are ready to apply the relevant data collection technique we realise that it is difficult to access the source of information.
    - The amount of time that will be required to develop the risk assessment with the relevant "method", technique or tool.
    - The real resources available: budget, materials, devices, personnel, etc.
    - The care invested in ethical aspects, such as anonymity and confidentiality.

In order to analyse the different standard assessment procedures existing (or "standardised" according to the Spanish Association for Standardisation (Asociación Española de Estandarización), 2013a), we could follow the criteria used by Moreno and Báez (2008) in order to collect and analyse the material existing in Spanish so as to assess the work-related psychosocial factors. These criteria are guiding features for global consideration and adaptation, and are as follows:

- Theoretical reference framework.
- Assessment system: questionnaire, interview, discussion group, etc.
- Targets and contents: exploratory, general, specific…; more or less wide factorial structure (in addition, some include aspects linked to Positive Psychology, the quality of working life, etc.).

- User friendliness and accessibility (for evaluators).
- Adaptability: to a specific sector, company size, etc.
- Validity and reliability.

These criteria may be added to some more (Spanish Association for Standardisation and Certification, 2005, 2013a), such as:

- Objectivity: to what degree the results obtained with a tool are independent from the person who uses and analyses and interprets data.
- Sensitivity: to what degree a method or tool is able to distinguish between different levels of the measurement subject.
- "Generalisability": to what degree a score may be extended to a certain universe of situations or a working population.
- Critical value: the reference value to assess the score measured and the decisions of the pass-fail type.

All this information should be found in the manuals, general instructions for use, technical file, etc. that usually come with these assessment procedures. There are increasingly more compilations where we may find information about some of the criteria stated above (Comisión Ejecutiva Confederal de UGT. Secretaría de Salud Laboral y Medio Ambiente, 2008; Foment del Treball Nacional, 2006; Grupo de Trabajo de la Comisión sobre Factores de Riesgo Psicosocial en el Trabajo del INSL, 2005; Guàrdia, 2008, 2010a; Nogareda, Catalina, Gil, Llaneza and Pascual, 2014).

What is the best assessment "method" or procedure, technique or tool of the so-called "standardised"?

At first sight, no "method", procedure, technique or tool may be considered the best. The answer would be that it depends, as **today we cannot contend the sole "method" approach** (Labour and Social Security Inspectorate, 2012; Moreno and Báez, 2008).

In this scenario, the aforementioned technical work becomes particularly important, including **analysing and comparing the different "methods", techniques and tools taking into account**

the range of advantages and disadvantages (Labour and Social Security Inspectorate, 2012).

In any event, **an assessment of psychosocial factors frequently uses several "methods", techniques and/or tools and, in many instances, the combination of quantitative and qualitative information is the most adequate election** (Labour and Social Security Inspectorate, 2012; National Institute of Safety and Health at Work, 2005). At this point, the concept of triangulation is of the utmost importance. But…

What is data triangulation?

Triangulation is a methodological procedure first presented by Campbell and Fiske (1959) which combines qualitative and quantitative techniques. A psychosocial risk should be assessed by crossing data from at least three types of different techniques (Cox et al., 2005). Concordance may be used as an indicator of result reliability and, depending on the scales used, of their concurrent validity.

More recently, the European Agency for Safety and Health at Work (2005) and the Labour and Social Security Inspectorate (2012), among others, point out the **suitability and need of this type of methodological strategies when assessing the psychosocial risk factors** (National Institute of Safety and Health at Work, 2005; Guàrdia, 2010a; Niño, 2006; Sebastián, 2008). We may find an excellent description in this regard in Sebastián and Jiménez (2014).

The information collection techniques may be classified according to three types of main sources, as regards their potential impact upon the discussion of the assessment results, as follows:

- *Pre-existing internal data* (accident statistics and reports, human resources rates or contributed by HR, rules, procedures, complaints, etc.) and *external data* (document analysis of

sector-relevant publications, bibliography about the topic, etc.), which provides for knowing the condition of the organisation at a given time.

- *Quantitative indirect data* (tests, questionnaires, etc.) which provide for efficient obtainment of answer statistics; and *qualitative indirect data* (for example, interviews, discussion groups, inventories), opinions and proposals by the interested parties which qualify the most standardised information.
- *Direct data* (checklists, observation of the working conditions, job analysis tools, etc.) by the expert.

As we already mentioned in the question *"Of the different existing "methods" or procedures, techniques and tools, what criteria may be useful for comparison purposes and to choose the best one for the specific assessment to be performed?"*, the election of the specific techniques in each case will be dependent on the specific factors to be assessed (National Institute of Safety and Health at Work, 2005), on the metrical qualities of each tool (as described by the Spanish Association for Standardisation and Certification, 2005 and 2013a) and on a series of conditions described to answer that question.

The data obtained from the different tools, evaluators and the workforce **are independently analysed by means of reduction, categorisation, classification and synthesis techniques so that they may be compared among each other later on in the concluding phase.** Depending on the scales typology or category-reduction procedures by means of grouping used we may apply statistical contrasts which will objectivise the analysis of results. This way we may assess their validity and expand the research of potential discrepancies found. They may be triangulated, including the following possibilities:

- *Intra techniques*: Comparing the data obtained from different units.
- *Inter techniques*: Comparing the data obtained about one or several empirical units.

In sum, methodological triangulation consists of elucidating the different complementary parts of the phenomenon as a whole and of

analysing why different tools yield different outcomes or consolidate each other, thereby enriching the analysis and providing it with rigour (Sebastián and Jiménez, 2014).

Following on with the triangulation issue, another question that may be asked is:

What is the relative weight of each type of evidence?

There is probably no agreement, and probably there should not be, about what exactly are the *data required* and how they should be taken into account for adequately assessing the psychosocial factors. There seems to be agreement in that it *basically depends* (National Institute of Safety and Health at Work, 2005; Pérez et al., 1998) on what the target is, the company typology to assess, its size, the time available and, let it be said, also on the prior expertise of the technician in charge of this assessment.

In spite of this, the assessment of the said factors should be matched to other work risk factors. It seems to be adequate to start from a first general assessment of jobs. This assessment should include and identify all the existing risks (article 16 of the LPOR; article 20 of the PSR; LSSI, 2012). For this purpose, for example, in the event of risks of an ergonomic origin, we would probably try to identify the presence of awkward postures, load handling, etc. From this point, and if required depending on the risks detected, we would undertake an in-depth study, usually focused on applying some specific tool in order to assess the said risk typology (article 5 of the PSR). Elucidating the relative weight of all the information obtained is determined, in practice, without the need to exactly establish a priori percentages as, in every specific case, its impact capacity will be different.

It is logical to infer that it should be similar in the psychosocial risks area. When planning initial data collection we should consider

the existence of a prior record or the problems which have already appeared, to which the health surveillance indicators obtained may be added.

We know what type of task they perform, timetables, timing, requirement types linked to each task, evident variability, the existence of work procedures, meetings, protocols in the event that..., information provided by the person in charge, potential prior collection of some kind of information obtained from employees, what data are obtained to assess other risks of the relevant job, etc.

All this information would allow for assessing those jobs (International Labour Office, 2013; LSSI, 2012; article 5 of the PSR). From this point, as with any other risk, we would perform an in-depth study usually focused on the implementation of some specific tool for certain risks. Also in this case qualitative data would probably guide us better about incidence, while qualitative data would guide us better to clarify the potential origin of these specific cases. This combination of approaches provides for more integral comprehension and allows for exploring coincidences or mismatches, both aspects being particularly important in order to perform an adequate assessment of these factors.

Do respondents have to answer every question included in a questionnaire or scale?

This is a major issue, not only in psychometrical terms, but also from an essentially practical standpoint. On some occasions, especially although not exclusively in general assessment procedures (general because they are not expressly designed for a specific sector or occupation such as, for example, FPSICO 3.1, ISTAS 21 version 2, DECORE, etc.) we may find that respondents consider that a significant number of the features they are asked about refer to variables which are not present in their occupations or with which they hardly identify (for example, people who do not have customer-facing occupations and who are interviewed about matters related

to this subject and about the emotional demand it entails). The risk then is that there may be a large number of questions which may be left unanswered. In this case, we may clearly see the important prior technical work involved in making a good choice of methodology that may minimise this aspect.

This problem may be solved in different ways, and each one has advantages and disadvantages. There are assessment procedures such as, for example, the one by the INSHT (2014) or the disappeared method by the INSL (Lahera, 2006; National Institute of Safety and Health at Work, 2009a), which require that, in order to insert the information collected in the relevant databases, the questionnaires need to be answered completely. Other assessment "methods" mitigate this source of error by using methods to allocate values to non-answers –the so-called "imputation"–, and still others state that as from a certain number of omitted answers, that questionnaire or scale is considered null and void and the computer program shall not include it when making the relevant calculation. This is the case, for example, of DECORE, which states that if 10 or more answers are omitted, the questionnaire is rendered null and the computer application does not consider it; or if more than three items are omitted in any of the four scales included, the correction system shall not take into account the scoring of that subject in the calculations pertaining to the said scale (Luceño and Martín, 2008).

Can standardised "methods" be modified *ad hoc?*

Sometimes we might wonder whether, for example, an assessment procedure which uses solely printed questionnaires or scales may be computerised so that it may be answered by a computer, or whether a certain computer programme may be modified to create information different to the one originally anticipated.

In both cases and in other similar ones the answer is always the same: we have to contact the procedure creators to obtain consent and to consult the potential feasibility and suitability of this particular

adaptation. For example, in the first case, in the event of the scale being validated with specific implementation conditions where only a printed test was used, if the data collection procedure is computerised we may not be sure of the reliability and validity of the values obtained, since its implementation conditions were different (Prieto and Delgado, 2010). In the second case, the answering options to the different questions included in a test often have weights (the scoring attached to each answering option) that the assessment procedure does not publish, so that any new calculations (averages, medians,…) shall not be valid (Lara, 2010).

Can we use "qualitative methodology" when assessing psychosocial risks?

Disregarding the fact of whether this is the most adequate terminology (Guàrdia and Peró, 2010), the answer is **YES**. Numerous publications (Alastruey and Gómez, 2013; Confederación de Empresarios de Galicia, 2012; Foment del Treball Nacional, 2006; Gabinete de Prevención, Calidad y Medio Ambiente de la Confederación de Asociaciones Empresariales de Baleares, 2009; Grupo de trabajo de la Comisión sobre factores de riesgo psicosocial en el trabajo y Trabajadores Inmigrantes, 2008; Guàrdia, 2010a; Guàrdia and Peró, 2010; National Institute of Safety and Health at Work, 2005; etc.) and standardised assessment procedures (FPSICO 3.1, MC-UB Battery, the Prevenlab-Psychosocial methodology, the Valencia PREVACC Battery, etc.) refer to it and include this type of information in their assessments.

The LSSI, in its guide (Labour and Social Security Inspectorate, 2012), refers to it several times; for example, when it states that this type of techniques *is usually useful at initial research stages to collect prior information, and at later stages to go deeper into the real reasons for particular scoring or in order to be able to discuss what intervention measures may be the most adequate in each specific situation* (page 25), or when commenting on the inspecting function of analysing the psychosocial risks assessment performed, and

states that when checking whether that assessment is complete[1] we should bear in mind that *if quantitative analysis (using questionnaires) does not provide all this required information, the technician should resort to qualitative techniques of interviews or discussion groups to obtain more rigorous knowledge of the content of the psychosocial risk factors the workforce is exposed to* (page 27).

At a European inspection level, and within the framework of the aforementioned "Psychosocial Risk Assessments" campaign, the guide prepared to lead inspecting activities specifically refers to performing inspections and how to assess the procedure used by the company in order to assess the risks, and comments that *the assessment of psychosocial risks should be performed by a technician belonging to an internal or external prevention service, duly trained for this activity, and who follows a method to identify and assess risk factors using questionnaires, interviews or discussion groups* (page 5).

Finally, we may conclude that this "methodology" allows for particular features of an organisation to be pinpointed, to analyse critical incidents or to examine thoroughly certain interesting and specific aspects. In addition, it is applicable in organisations of all sizes (Grupo de Trabajo de la Comisión sobre Factores de Riesgo Psicosocial en el Trabajo y Trabajadores Inmigrantes, 2008; Meliá et al., 2006) and complements the quantitative methodology (National Institute of Safety and Health at Work, 2005).

If interviews are used, how many should be performed?

The "ideal" number depends on two aspects: the level of specificity of the set targets and the social diversity existing around the subject to be examined. **The greater diversity, the greater the number of interviews to be performed** (Gabriel, 2001).

[1] It has enough accurate information about the psychosocial risk factors in this company and about the potential causes.

The rule to set the specific number is determined by the **principle of saturation**: performing a sufficient number of interviews that allows to *cover* the different discursive positions that may exist in relation to the subject of research (for example: professional category, type of centre, type of task, hierarchical position, relevant department, geographical destination,...).

It is usually wrong to consider one sole interview by category, as it would hamper *distinguishing the particular or atypical features of the respondent's discourse as well as apprehending social features…* (Gabriel, 2001, page 491). It is precisely repetition *which allows for extracting from interviews the social component existing in the subject's behaviour or position, but when this repetition is redundant and the discourse is clear, performing more interviews is not practical as it does not contribute or mean an informational supplement* (Gabriel, 2001, page 491). Therefore, an excessive number of interviews would only unnecessarily prolong and raise the cost of data collection without contributing to a significant increase of already known aspects.

Any suggestions on how to perform the interviews?

It is important to make it clear that stating that an interview, for example, is a useful method to assess psychosocial risks, does not mean that any interview (more or less improvised) will be so (page 23). We fully agree with this statement by Peiró (2011). Carrying out good data collection through an interview goes far beyond the common and reductionist image consisting of preparing an intuitive and quick list of questions somebody is "subject" to, and the success of an interview depends, among others, on the very selection and training of interviewers, the quality of the questionnaire employed or the way to access the respondent (González and Padilla, 1998). And although the format of this publication –particularly of this chapter– requires brevity in the subjects dealt with, it does not prevent us from presenting below some suggestions for successful development.

Firstly, we should take into account that for interviews to have any probability of being successful, the respondent should meet certain requirements, such as the following: he/she should have the information we will request; he/she should be able to convey the said information and be motivated to do so (Fraile, 2013).

On the other hand, a successful development of an interview entails a series of issues to be considered, the so-called "performance technique" (Sebastián, 2002), including:

- Preparing the interview: Presentation of the interviewer previously announcing his/her visit and the reasons thereto; performing the interviews when respondents' urgent tasks are not interrupted, etc.
- Creating an atmosphere of trust: As soon as the interview begins, it is very important to generate mutual trust between interviewer and respondent. For this purpose, the interviewer needs to provide information about the purpose of the interview, issues related to the confidentiality of information, the importance of knowing the respondent's opinion, etc.
- Having good listening skills: Not only should the interviewer remain alert to whatever the respondent may explicitly state,

but also to what they do not want to say or are unable to state without help; they should manage silences adequately...

- Retaining the control of the interview: Trying not to lose interview control by resorting to secondary issues or topics unrelated to the interview subject.
- Helping the respondent perceive his/her responsibility: The interviewer should clearly inform respondents that their answers need to be sincere and true, and that it is their responsibility.
- Knowing how and when to finish: Interviewers should know how to "cut" at the right time, particularly if more interviews will be needed, so that the door is left open for further interviews. They should add: «*if you wish to comment, add or clarify anything else, we are at your disposal at…*»; value and thank their participation.

Below we address some very specific aspects related to the specific wording questions should have. Some recommendations in this regard are as follows (Padilla, González and Pérez, 1998):

- Make specific questions. One question is specific if different respondents understand it in the same way.
- Pay special attention to the wording of tough questions. For example, a question such as *"Do you usually shout at your subordinates?*", is a question loaded with social desirability (among other features). In this case, for example, it could be advisable to lose some specificity to "soften" it and that way encourage the respondent to provide a true answer rather than a socially acceptable one.
- Avoid biased wordings or wording that may produce bias. For example, it is not the same to ask *"Did you hear the threat?*" than "*Did you hear a threat?*". In this case, the article is highly important.
- Avoid questions with more than one idea or concept, such as, for example: *"Do you think your tasks are many and difficult to perform?*". It would be more adequate to ask about quantitative and qualitative aspects separately.
- Avoid negative formulations. Accumulated evidence proves that it is more difficult to understand negative sentences than those which express an identical idea but positively. For example:

"Do you think that the preventative steps taken to improve the workload are not adequate?". In this case, the negative does not make any contribution and is both confusing for the respondent when answering and the interviewer when having to interpret the answer given.

(You may consult other interesting aspects in the aforementioned quotation and in Martín, 2011 and Perpiñá, 2012).

Finally, after preparing the draft of the interview script, some clues to reviewing the questions and to identifying and preventing certain defects in time could be the following (Padilla, González and Pérez, 1998):

- Regarding the content: Is it necessary? Are more questions about this topic necessary?
- Regarding the drafting: Could it be expressed more clearly? How? Can it have several interpretations? Is there any bias?
- Regarding the location: Is it in the right place? Can the preceding questions impact on the answer?

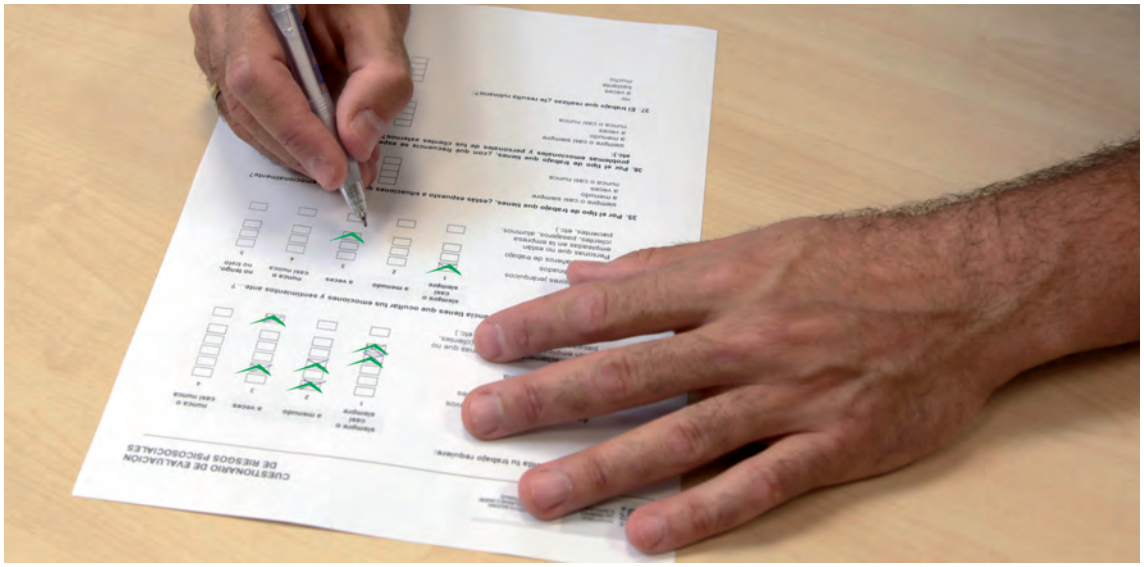
Can we use different assessment "methods" in different departments, jobs, etc. within one organisation?

For example, it may be the case that in a high school teachers' psychosocial working conditions are assessed with one specific "method", and services and administration personnel's working conditions are assessed with another one. Or that, within one company, it is decided that the psychosocial working conditions of a group of workers be assessed using printed and standardised questionnaires, because they are easily gathered in the same place and on the same date, and another group be assessed by means of telephone interviews, as it is very difficult to have face-to-face contact (for example, employees who work in changing geographical locations) (National Institute of Safety and Health at Work, 2014).

What we should not lose sight of is that every decision has its advantages and disadvantages and, in this case, we would have, among others, the major disadvantage that it would be more difficult to compare results (performance of comparative studies) between units of analysis, groups, collectives… whose psychosocial factors have been assessed in different ways.

Stage 3. Planning and performing the field work

On many occasions, this stage is much more important than what may be considered at first sight. Some assessment processes were well planned in the beginning and, finally, were ruined due to inadequate planning or implementation of this stage. Interview(s) with the people involved, observing their work, delivering scales or questionnaires, etc. should not be done on the spur of the moment. **It is essential to have anticipated the practical issues of the field work** (the ideal time, the place to undertake it…). Likewise, the people involved should have been informed beforehand of these aspects and of the stated goal (National Institute of Safety and Health at Work, 2014).



We need a technical approach to the following issues (some of them already commented upon):

- The practicality of having all employees for the evaluation or, on the contrary, to sample.
- If tests are used: How will they be delivered, answered and returned; channels to solve doubts; etc.
- Place and time to undertake the assessment tests (preferably during working hours, but ensuring the provision of services. For example, ensuring that every shift is appropriately covered in a hospital).

- Make a decision as to the final units of analysis because if, for example, questionnaires or scales are used, we would have to establish beforehand what questions regarding analysis will be included.
- Preservation of anonymity in answers and/or guarantee of confidentiality in data treatment.
- Other issues.

As regards the standardised assessment "methods", they should include guidelines about the way to develop this stage.

In sum, it is important to bear in mind two major targets of this stage (Martínez-Losa, 2006):

- Obtaining valid and reliable information.
- Providing for the participation of all employees who should be part of the assessment.

Below, and to complete this stage, we will analyse several aspects relating to good test use and two important aspects: anonymity and confidentiality.

Are there any guidelines on how to manage tests correctly?

In addition to the suggestions included in the relevant manual, instructions, etc., of the selected "method" on this topic and, in general, about the proper implementation of tests, the *International Test Commission (ITC) Guidelines on Test Use* (prepared by the ITC, http://www.intestcom.org, and taken on by the *Test Commission of the General Council of Official Associations of Psychologists of Spain* – available in Spanish at the following address: http://www.cop.es/index.php?page=directrices-internacionales -) set forth some guidelines for users (administrators), such as the following:

- Establish a good relationship with assessment participants, welcoming them and addressing them in a positive way.
- Try to decrease the anxiety experienced by assessment participants, avoid creating or increasing unnecessary anxiety.
- Eliminate potential distractions, such as alarm watches, cell phones, pagers, etc.
- Ensure that everybody has the materials needed to complete the test before starting.
- Supervise test implementation conveniently.
- Strictly adhere to the manual instructions of the test, making any relevant adjustment for people with disabilities.
- Read the instructions unhurriedly and clearly.
- Observe and write down any potential deviation from standard test procedures.
- Ensure all materials are there at the end of each session.
- Allow assistants to take care of test management only if they have been properly trained (there are "methods" which distinguish between an examiner or administrator and the person in charge of the assessment process. In fact, the UNE-ISO 10667 standard distinguishes these two figures, calling them "assessment administrator" and "assessor" (Spanish Association for Standardisation and Certification, 2013a, 2013b)).
- Ensure that assessment participants are not left unattended or subject to distraction during the implementation session.

What is the difference between anonymity and confidentiality?

Too often we see both terms used improperly, either because they are considered synonyms while they are not, or because one is mistaken for the other. It is enough to check the definitions given to these terms in Spanish by the Real Academia Española (The Royal Academy of Spanish Language) to understand the difference.

Anonymity is the character or state of being anonymous, this word coming from the Greek and meaning "without a name". When we refer to this term in our field we usually refer to questionnaires, scales, interviews… where the name of the person providing the information is not explicitly given. The reasons may be diverse: increase the sincerity and freedom when answering a series of questions, dispel the fear of reprisals for stating certain aspects, etc.

On the other hand, confidentiality is the quality of confidential, which is an adjective that, in the twenty-third edition of the dictionary of Spanish (http://www.rae.es) is defined as *what is done or said trusting that it will not be disclosed*. In our area it is used to refer to the care with which the data collected in psychosocial assessments should be stored, kept and used. According to Sebastián (2008) *the assessor shall strike a delicate balance so as not to encroach upon* (employees') *intimacy procuring, at the same time, to perform an efficient preventative action*.

Stage 4. Analysing the results and elaboration of the report

The analysis stage should provide for finding the cause(s) for the detected problem(s) when examining the results obtained. In order to establish these causes, we should take into account that a specific problem may have diverse causes and we need to try and identify the "real" and not only the "apparent" causes. **In addition to detecting the real causes for potential problems, at this stage we should proceed to assess the risks** (article 5.1., Preventive Services Regulations (PSR), National Institute of Safety and Health at Work, 2014).

Limiting ourselves to the questionnaires and scales (tests), the *International Guidelines on Test Use* (http://www.cop.es/index.php?page=directrices-internacionales) also set forth some guidelines for users (administrators) about scoring, analysing and interpreting the results, which are summarised as follows:

- Follow the scoring standardised procedures to the letter.
- Make sure not to draw wrong conclusions by using outdated or inadequate scales for the assessed group.
- Calculate compound scores when applicable, using the formula and equations set forth in the test manual.
- Inspect the results in order to detect potential scoring mistakes or abnormalities.
- Accurately describe and identify the results, rules, scale types, formulae, etc. used.
- Have good professional comprehension of the theoretical and conceptual test bases, the technical documents and of the guidelines to use and interpret scoring.
- Have good professional comprehension of the scales used, the norms used and of the scoring limits.
- Try to minimise any potential bias towards the assessed people when interpreting test scoring.
- Use appropriate standards or groups for comparison when available.
- Avoid generalising the test results as features or characteristics of people who have not been subject to measurement by the test.

- Take into account measurement reliability and error in each scale, as well as other factors which may artificially alter the results when interpreting scoring.
- Bear in mind the data available on the validity of the measured construct in relation to the assessed groups' features, such as culture, age, social class, gender, etc.
- Use cut-off points to interpret scoring only when empirical data on their validity is available.
- Be aware of potential social stereotypes of assessment participants (in relation to their culture, age, social class, gender, etc.), so as not to interpret tests in such a way that the said stereotypes be perpetuated.
- Consider any individual or collective variation included regarding the standard procedure when implementing the tests.
- Take into account any prior experience the assessed person may have had with the test, in the event of there being data available about the effects of the said experience upon the test performance.

Finally, the analysis results and assessment should materialise in an assessment document. Precisely with regard to communicating results, the aforementioned *Guidelines* suggest the following:

- Ensure that the technical level of any report content is appropriate for recipients to understand it.
- Provide the information about results in a language the recipient may understand, so that the possibility of mistaken interpretations is minimised.
- Use such form and structure for the report that is appropriate to the context of the assessment.
- Provide assessment participants with information in a constructive and positive way (regarding these first features mentioned you may find more information in the UNE-ISO 10667 standard by the Spanish Association for Standardisation and Certification, 2013a, 2013b. For example, when considering feedback or supplemental information on reporting, Annex D).
- Make it clear in the reports that tests results are confidential.

- Make it clear that the test data are only one source of information that should be analysed together with other sources (bear in mind the triangulation concept mentioned above).
- Explain how the assessment results should be weighted in relation to other sources of information about the individuals assessed.
- If applicable, provide decision makers with information about how they may use the tests' results to improve their decisions.
- Explain and substantiate the use made of the tests' results to categorise people with diagnostic purposes or otherwise.

Following on with the assessment report theme, one frequent demand of information is the following:

Is there any outline standardised or compulsory by law which provides the minimum sections or information that should be included in the assessment report?

In addition to the general provisions included in the Law on Prevention of Occupational Risks (LPOR), Act 31/1995, in articles 16 and 23, and in chapter II of the PSR, as of today there is no more specific legal pattern.

However, in our opinion Guàrdia's (2010b) proposal is simple and clear enough so that, following an outline such as the one he suggests, some aspects which are both compulsory and important might not be stated. In summary, the idea is as follows:

1. A brief introduction outlining the basic features of the assessed organisation: activity, size, geographical distribution, etc.
2. A section explaining why a specific method has been chosen.
3. A detailed explanation about the procedure followed: How was the sampling, if any, performed in different units of analysis; deadlines for data collection; etc.
4. When different recording techniques are used (questionnaires, discussion groups, interviews, etc.) they should be clearly

described so that it is clear which was applied to what group and how.

5. Explanation of the guarantees adopted to manage the confidentiality of the information.
6. Provide information about how databases were generated, with what type of software or what safeguards were adopted to protect the access to information.
7. The results section should be clear, explained as simply as possible. Even though analysis may be complex, their presentation should not be so.
8. Simplicity is not incompatible with exhaustiveness when presenting results. In addition, the body of the main report should only include the relevant information, leaving secondary information for the annexes.
9. Include a section of conclusions adjusted to the data obtained. A good practice includes quoting in the conclusions the specific report data which support the said conclusions.
10. In the suggestions and intervention recommendations we refer to section 8.4 above.
11. A final summary is recommended.

To sum up, and as Guàrdia (2010) mentions, *in essence, a report should be complete, technically impeccable and coherent with the assessment process performed* (page 98).

Guàrdia's is not the only proposal. We encourage the reader to study the proposal by Sebastián (2008) in Annex I of his work.

Finally, regarding this matter of the report, we would like to add that the "container" or structure is as important as the "content"; i.e., what is said and how it is said. With regard to the latter, we should highlight that a good and proper drafting, beyond what a computer programme may automatically generate, writing the positive aspects that may have been detected in the assessment, preventing unnecessary attacks or the use of violent or defiant vocabulary, etc., will facilitate a positive perception of the document and convey the idea that it has been prepared in order to improve the current situation (Lara, 2010).

And to finish with, a recurring question within this fourth stage …

What is an acceptable response rate for an assessment to be representative?

This concern usually arises from the possibility of facing one of the two following situations: a) although we included the whole working population, we obtained a low response rate; b) we sampled and the selected units did not totally or partially answer.

The general idea is clear: **The greater the response rate, the better** (Manzano, 1998). Why? Because the greater the response rate, the better the estimates made (or termed in complementary terms: The greater the non-response rate –non-answer by unit– the lesser credibility for the results).

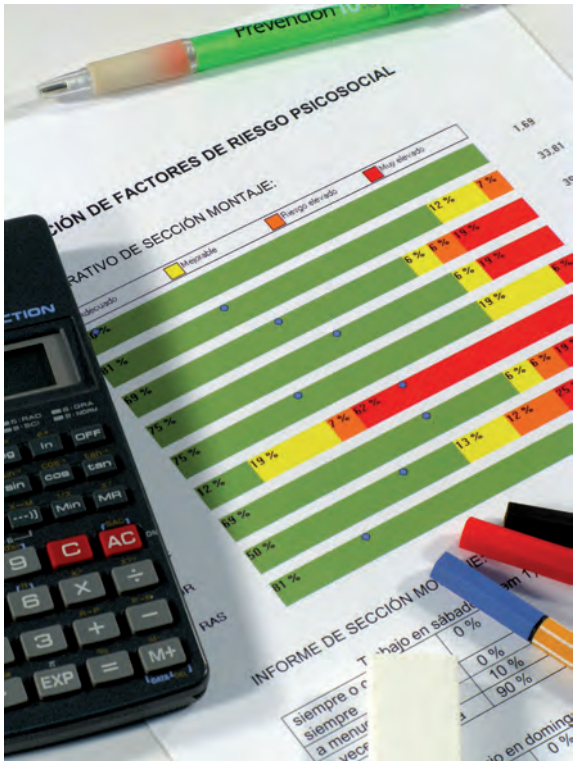
However, what is the minimum admissible response rate, or the maximum admissible non-response rate? There is no simple answer, as in our preventative environment, if we obtain low participation rates, we should seriously examine the reasons for such a low participation. The answers to this question may be varied:

- The information strategy was insufficient.
- The information collection strategy failed: The times chosen, the deadlines given, etc. were not the right ones.
- The safeguards about information anonymity were not sufficiently considered and so the seeds of doubt and suspicion to participate were sown.
- The procedure/method/technique/tool chosen to collect information is “burnt out” in this organisation and has not been efficient.
- The discouragement to take part in preventative aspects is high (caused, for example, by repeated previous denials to implement certain preventative action proposals).
- Etc.

As we may see, sometimes low participation is a very interesting datum to take into account and analyse thoroughly.

According to Hernández and Martínez (not dated), the answer to this question depends on the nature of the non-answer: If the units that do not answer are completely random, the non-answer could be ignored and the answers given used as a representative population sample. If whoever does not answer tends to differ from whoever does answer, the bias of the results when using only those who did answer may make the survey lose its value.

Precisely one useful way to measure the response rate is by checking whether non-answer is random; i.e., whether the workers who do not answer are concentrated in a population group with specific features (González, Padilla, Pérez, 1998).



To paraphrase Hernández and Martínez again (not dated), many references provide advice about the relevant quotas to accept the response rates but, in general, the establishment of the said absolute criteria for an acceptable response rate is dangerous and has led many surveyors to feel unfounded complacency about the lack of answers.

One of the few assessment procedures that does establish a specific numeric value is CoPsoQ-istas 21, version 2. Its manual (Moncada, Llorens, Andrés, Moreno and Molinero, 2014) sets forth that *an response rate is deemed acceptable when at least 60% of the staff belong to the assessment environment, and is better the closer it is to 100%* (page 67).

We will complete our reflections on this subject by remembering the maxim that *the best way to face a lack of answer is to prevent it*. Therefore, some ideas that could improve this response rate include the following:

- Perform an adequate presentation of the research on psychosocial risk factors to be undertaken (legal framework, research stages, commitment to undertake the improvement measures to be agreed upon, etc.).
- Make the workforce aware of the importance of having a high participation rate so that results are as representative as possible.
- Provide thorough information about the preservation of anonymity and confidentiality in data treatment.

rr = (number of units that / population units) x 100

nrr = (number of units that do not answer / population units) x 100

Figure 3. Formulae to calculate the response and non-response rates in percentage.

Stage 5. Devising and implementing an intervention programme

Although the fifth and sixth stages are not included in the assessment process itself and are part of what would be called, respectively, psychosocial intervention and assessment of the efficacy of the intervention measures (what the Technical Guide of Documentary Simplification (Guía Técnica de Simplificación Documental) issued by the National Institute of Safety and Health at Work (2012a) calls "crosschecking assessment"), have been maintained within this outline to highlight what would be the integral management of psychosocial risks (see figure 1). Therefore, we include below certain basic information in this regard.

In legal terms, preventative action planning is established in article 16 of the LPOR. The literal wording of this article, section 2, paragraph b, is as follows: *If the results of the assessment anticipated in paragraph a) revealed risk situations, the employer shall undertake the preventative activities required to eliminate or reduce and control the said risks. The said activities shall be the subject of planning by the employer,* ***including for each preventative activity the term to undertake it, the appointment of the people entrusted with the performance and the human and material resources required for execution****…* (emphasis in bold letters added). Accordingly, the law provides the minimum elements required that should be included when planning the preventative actions to be developed.

Leaving aside the legal side and focusing on a strictly technical dimension, some usual questions referring to intervention and prioritisation measures thereof are as follows:

What intervention measures may be implemented in order to improve the "X" psychosocial factor?

Although a large number of standard "methods" and publications include in their pages information relating to proposals for action usually arranged by factors (working hours, role played, social support, etc.), we should not forget Vega's (National Institute of Safety and Health at Work, 2009b) interesting words, when saying that *there is no psychosocial intervention vade mecum which describes the right type of programmes for each situation… There are some guidelines for intervention emanating from the main theoretical models and the recommendations that may be extracted from thorough analysis of the experiences and best practices in real companies. However, starting from these general lines, each situation, each context requires a tailored intervention, with specific solutions built by all agents involved* (page 185) (see also Fernández, 2010; or Lucas, 2008, page 75).

Following along this same line, for example, the INSL's assessment procedure, which included information relating to certain patterns of behaviour depending on the results obtained, rightly pointed out that these recommendations included were intended to be indicative, should not be understood as universally valid and univocally implementable, and its establishment within the company would be linked to the specific features of each organisation. These recommendations should in no event involve omitting the minimum health and safety conditions for the workforce.

Finally, we should highlight that the intervention measures need to be linked to the results of the psychosocial assessment. In addition, employees, middle-managers and senior officers should assume ownership of these measures for them to be more likely to succeed.

Ortiz (2012) also states that improvement measures should be implemented even if the factors reached satisfactory levels. The idea would be to maintain and promote the said results and prevent their becoming unsatisfactory over time.

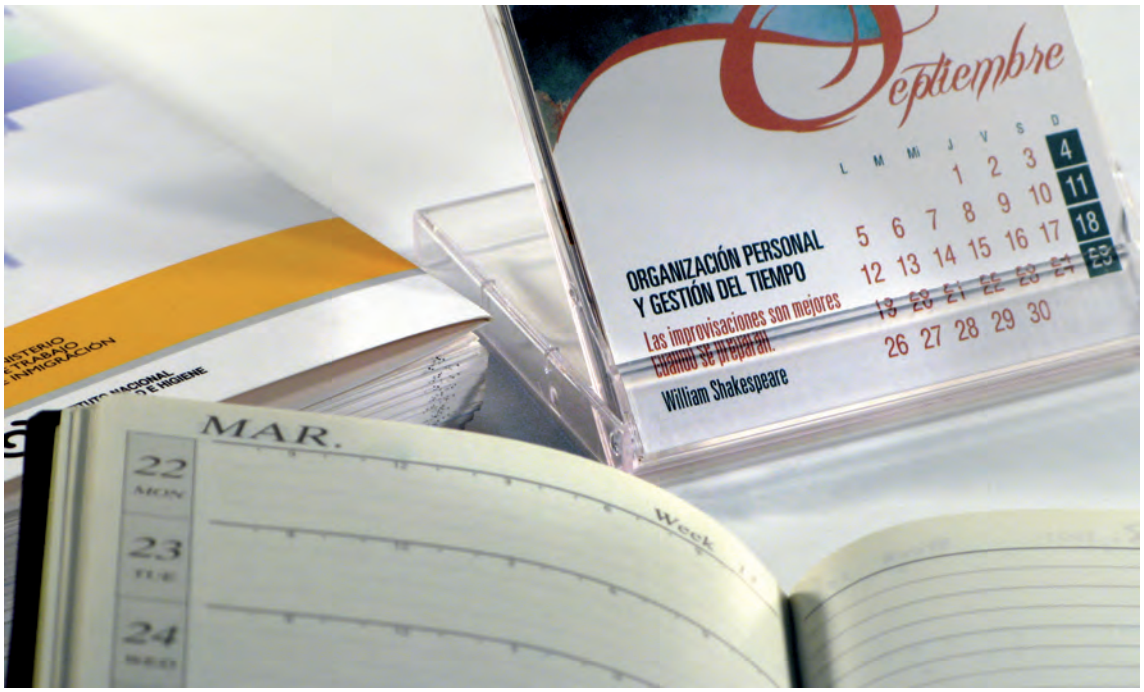
What criteria may be used to prioritise psychosocial preventative measures?

In addition to considering the provisions of article 15 of the LPOR about the principles for preventative action, the FPSICO 3.1 assessment procedure by the National Institute of Safety and Health at Work (2014), in the section dealing with "proposals for improvement", includes a series of guidelines which may also be generalised if also assessed with other "methods". In this sense, the procedure proposes that quantitative and qualitative criteria may be used in combination when prioritising. The former would include the number exposed, the duration and magnitude of the exposure, etc.; while the latter would include the appropriateness of the intervention, the cost of acting or non-acting, the level of acceptance of the solutions, the supremacy of those interventions which reduce exposure to more than one factor, etc.

Stage 6. Follow-up and control of the actions taken

The aforementioned article 16 of the LPOR provides in section 2, paragraph b, that *the employer should ensure the* ***effective execution*** *of the preventative activities included in the planning performing, for that purpose,* ***continuous follow-up****. The preventative activities should be modified when the employer notices, as a result of the periodical checks provided for in paragraph a) above, that they are inadequate for the protective goals required* (emphasis in bold added).

On the other hand, article 20 of the PSR, dealing with the arrangement of the preventative action with an outsourced preventative service, sets forth a series of minimum issues that those arrangements should contain, including *the duty of the preventative service to undertake, as often as the existing risks may require,* ***follow-up and evaluation of the implementation of the preventative actions*** *resulting from the assessment* (emphasis in bold added).



Considering the legal foundations of this stage, we should agree with Fernández (2010) that this stage is completely essential to establish whether the interventions have the desired effects or if a change of direction in the preventative measures developed is required. In addition, this follow up *provides for tailoring*

the strategies to the events or changes that may occur in the organisation, which may alter the development of the preventative measures (page 111).

El Grupo de Trabajo de la Comisión sobre Factores de Riesgo Psicosocial en el Trabajo del INSL (2005) states that the follow up of the preventative measures should comprise:

- whether or not to accept the proposed measures;
- the meeting of deadlines;
- the difficulties encountered to implement the measures; and
- the verification of the real effectiveness of the actions taken.

Some usual questions are as follows:

Do we need to "repeat the risk assessment" or is it enough to "use follow-up indicators" in order to perform the intervention assessment?

In our opinion, the doubt is presented in a confusing way and distorts the true sense of the preventative action assessment. Firstly, if we intend to interpret articles 4.2 and 6.1 of the PSR, we should use its same terms, which would mean placing the debate between *reassessing from initial assessment* (article 4.2) and *reviewing the risk assessment* (article 6.1).

The *reassessment* of jobs provided by article 4.2 of the PSR is not linked to the assessment of preventative actions, but rather to three potential changes that may occur in the development of the organisation activities, regardless of the specific preventative interventions that may have been undertaken.

On the other hand, *reviewing the assessment* as provided by article 6.1 of the PSR may, or may not, give rise to reassessing all or some jobs. In any event, potential damages or inadequate preventative actions implemented are some of the review scenarios contemplated.

The follow-up indicators that should be established and registered before/during/after the psychosocial intervention provide information to identify the said scenarios, but do not replace the potential need to reassess the risks.

As we have already mentioned, planning preventative actions should be subject to *continuous follow up* (article 16.2b LPOR). The idea is to confirm whether the measures are being implemented and if so, in a suitable way; whether the provisions established (schedule, people responsible, resources, etc.) are complied with in good time and in an appropriate manner, detecting the reasons for potential breaches and amending them.

The *periodical control activities* (article 16.2a LPOR) allow, among other things, to see whether the preventative activities are appropriate and sufficient (article 16.2b de la LPOR) or if they should be modified, representing one of the sources of information that may cause for a review of the initial assessment (article 6.1 of the PSR).

We need to use follow up indicators to ascertain whether the preventative actions are providing for reaching the targets set; i.e., to assess the results of the intervention, their efficacy and efficiency. In Psychosociology, improvement actions do not usually have an immediate effect. In addition, organisational changes, which play a central role in collective preventative actions and address the origin of the exposure, may be complex and implemented gradually. Therefore, it is advisable to establish indicators, parameters that allow for exploring results from a temporal standpoint.

However, the appearance of damages or the results of health surveillance should not be the only sources of information that may warn against the inadequacy of preventative measures. In the case of psychosocial risks, the damages may appear in the medium to long term, following years of exposure, and may not be apparent in the initial stages.

Consequently, reassessing the exposure, exploring the psychosocial working conditions, is an essential procedure to value the efficacy of preventative actions following implementation and when enough time has elapsed for their effects to have matured.

It would be equivalent to what the Guía Técnica de Simplificación Documental (Technical Guide of Documentary Simplification) by the National Institute of Safety and Health at Work (2012a) calls "crosschecking assessment".

According to the British Health and Safety Executive (HSE) - http://www.hse.gov.uk/stress/standards/step5/index.htm -, evaluating the efficacy of the solutions applied is part of the psychosocial risk management, and the specific modality and time to do it will depend on two factors:

- the type of actions implemented and how long it will take to undertake them;
- the estimated time for actions to have an effect/impact.

Therefore, and according to the foregoing, we may raise the following questions:

What indicators may be used?

Vega (National Institute of Safety and Health at Work, 2009b) coordinated an INSHT project consisting of the analysis of a series of psychosocial interventions undertaken in Spain (for more information in this regard, see the INSHT's Psychosocial risks thematic web, specifically the psychosocial intervention section, and the specific psychosocial intervention space accessible from the following address: http://intervencion-psico.insht.es:86/). The intervention experiences which developed this kind of assessment included the following indicators:

- Quantitative: Analysis of sickness leave; number of participants/users in certain programmes or activities; job turnover rate or number of incidents in production or service.
- Qualitative: Opinions of the agents most directly involved in the intervention.

Obviously, the number of indicators is not exhausted with the ones presented here (for more information, see the European Agency for Safety and Health at Work, 2003; at the HSE website, http://www.hse.gov.uk/stress/standards/step5/index.htm; Kompier and Cooper, 1999; Kompier, Cooper and Geurts, 2000; Leka, Vartia, Hassard, Pahkin, Sutela, Cox and Lindstrom, 2008; Oeij and Morvan, 2004; Peiró, 2007). Each organisation needs to find and/or define those which are best adapted to their specific features and needs. It really makes things much more straightforward if the assessment of the efficacy, efficiency and/or effectiveness of the actions proposed is part of the intervention planning from the very beginning, as it will be easier to have initial data and, therefore, to create a more powerful system of indicators.

And lastly…

When to assess the interventions?

There is no consensus about the specific time to undertake the follow up of preventative actions (data collection). Peiró (2007) believes that we should take into account aspects such as the following to establish the right time:

- *Consider the time required for changes to occur* (this is also mentioned by the HSE). This will depend on the nature of the phenomena to be changed.
- *Leave enough time for changes to consolidate and for the relevant effects to reach the usual level, after the processes that originated them have stabilised.*

He also mentions that an inadequate choice of the time-scale that should elapse from the beginning of the intervention until the effects may be measured could cause mistaken decisions to be made about the programme and its continuity.

Finally, and summarising, where there does seem to be a certain consensus in related literature is with regard to the performance of

various assessments in order to check the evolution of the steps taken and the first one to be undertaken after leaving enough time for the changes implemented to start to have an effect (for more information, please see the references quoted in the previous question).

Lastly, and to sum up this stage of follow-up and control of the actions taken, we may say that there are several supervision, follow-up, control and assessment activities of the interventions, so that we should choose in each case the most advisable strategy, there being no unique a priori criteria. The psychosocial intervention assessment indicators should be tailor-defined and be specific for the planned targets and actions, and it is recommended that both the process and the outcomes be included. Likewise, we should choose the time, the mechanisms and the agents responsible for assessing the intervention.

3. LET'S TALK ABOUT…

In this chapter we will cover a series of aspects that, either because they affect the whole assessment process or because of their complexity or extension, require an explanation that does not provide for their being included in one or other stage of the assessment process.

Hence, firstly we include a section in which, aware that in the psychosocial arena terms are often used with certain inaccuracy, we intend to shed some light in this regard.

In a second section, also devoted to terminological issues, we present the differences existing between different words linked to the area of methodology where, as in the previous case, we often find a large number of them being inaccurately used.

Thirdly, we shall provide answers to recurring questions linked to situations of violence, especially those related to psychological harassment in the workplace.

Lastly, we will cover in some detail some interesting issues for psychosocial assessment included in a standard that has been referred to on several occasions and for different reasons in this publication: The UNE-ISO 10667 standard.

3.1. Basic concepts in Psychosociology: Some guidelines

Managing psychosocial factors sometimes generates uncertainties, even among specialised prevention experts. Some of them relate to apparently simple but very important issues: a certain terminological inaccuracy in the psychosocial arena.

The fact that some terms are of frequent social use and, therefore, are part of the vocabulary we all have interiorised (the clearest example may be found in the term "stress") make them gain social visibility, which contributes towards sensitising and raising awareness about the psychosocial risk but, at the same time, makes it even more necessary to clarify some essential terms.

This is what we will attempt to do in this section 3.1. As the reader may have suspected, not all which matter are there, but all which are there matter. Let us start:

I. Psychosocial factors

From a preventative standpoint, psychosocial factors are the working conditions or features relating to the psychosocial arena; i.e., relating *to the organisation, work content and the performance of tasks, which are able to impact both the worker's wellbeing or (physical, psychical or social) health and the development of work* (National Institute of Safety and Health at Work, 1997). Whether they have a negative impact on workers' health depends on their sizing.

We should highlight that psychosocial factors are present at every work and organisational setting regardless of the industry, job, function, etc., and that, as opposed to other types of working conditions related, for example, to safety or industrial hygiene, has the great advantage that, if they are well designed, not only do they not damage workers' health, but rather contribute towards their wellbeing, work motivation and satisfaction, which necessarily impacts upon the achievement of business results.

Therefore, we may say that **contributing towards optimising the psychosocial factors is the best guarantee of ensuring the workers' psychosocial health.** This is mentioned in TNP 926 when it states that *one of the features that sets psychosocial factors apart from other working conditions is that, although they are potentially risk factors, a preventative target should not be to eliminate or reduce them, but rather to optimise them in order to prevent the adverse effects and promote their beneficial effects* (National Institute of Safety and Health at Work, 2012b). As an example of psychosocial factor we may refer to *working hours*.

II. Psychosocial risk factors

When these working conditions referred to in the previous section are badly set or have a poor design, they mean an exposure to working conditions which may cause potential unrest and/or harm and, therefore, become psychosocial risk factors which, under the appropriate circumstances, may contribute towards generating a psychosocial risk *per se*. In other words, *psychosocial factors, when they have the potential of negatively affecting the health and wellbeing of the worker, are risk factors* (Benavides, Gimeno, Benach, Martínez, Jarque and Berra, 2002).

Following on with the example of *working hours*, if the working time and/or the work schedule are systematically extended beyond the original plan or are changed without prior notice; if there is no flexibility or if the worker cannot participate in any event or if conciliation is made more difficult or impossible, etc., the working hours may become a psychosocial risk factor. The *working hours* may be a work condition that does not negatively affect the worker or even has a positive effect on him/her or, on the contrary, may be a poorly designed working

condition, thereby becoming a psychosocial risk factor. We would then be speaking of *those aspects of the work design, organisation and management, and their social and organisational contexts, that have the potential of causing psychological or physical damage* (Cox and Griffiths, 1996).

In the technical-professional practice and also in various research documents and publications, "psychosocial factors" and "psychosocial risk factors" are being used as equivalent terms, which is not a handicap when dealing with preventative management. Nevertheless, it would be desirable, particularly from a technical-preventative viewpoint, to be aware of what we are referring to in each case, as according to Moreno and Báez, *psychosocial factors and organisational risk elements are contiguous but different elements* (National Institute of Safety and Health at Work, 2010a), so that **a psychosocial factor may or may not become a psychosocial risk factor, the latter predicting or triggering psychosocial risk situations.**

III. Psychosocial risks

As with other risks, the first and foremost task for a prevention technician specialising in Psychosociology is to prevent the generation of risks of a psychosocial nature. As with other work risks dealt with by other preventative specialties, in Psychosociology we work on terms of probability; i.e. we speak of the likelihood of suffering damage as a result of exposure to a work situation presided over by psychosocial risk factors, so that **a psychosocial risk situation is very likely to damage the health of the people exposed to it.** *Psychosocial work risk is the fact, event, situation or status resulting from the organisation of work which is very likely to affect the workers' health and whose consequences are usually important* (National Institute of Safety and Health at Work, 2010a).

We should underline that psychosocial risks usually have multiple causes, are not usually due to the presence of one sole risk factor (may even contribute towards non-psychosocial factors, such as environmental or hygienic conditions and also may impact upon potential personal vulnerability conditions and/or family or social situation). Following on with the example referred to in the previous

section, the psychosocial risk factor called *working hours* as described above may contribute towards generating a psychosocial risk such as stress. Depending on the exposure and on the greater or lesser importance of the consequences involved in being exposed to this risk factor, it will contribute in a greater or lesser degree towards generating the risk of stress. Hence, in this case, if the working hours become a psychosocial risk factor, we say that it may trigger mental strain and work-related stress. And, in addition, the greater the chance of it causing damage to the people exposed, the greater this risk of stress shall be. Therefore, in Moreno and Báez' words, *psychosocial risks would be defined as those that are very likely to have important consequences for health* (National Institute of Safety and Health at Work, 2010a).

IV. Damages of a psychosocial origin

We often come across certain confusion between psychosocial risks and their consequences. It is not uncommon to hear or read that workers are increasingly facing psychosocial risks such as anxiety, depression or addictive behaviours (alcohol abuse, medication, etc.), when they should really be considered as consequences or damages for people's health, alterations of the emotional and behavioural arena, respectively, and not as psychosocial risks.

As we have already explained, the exposure to psychosocial risks is likely to entail health effects for the worker, and these effects may be on a physical, psychical and emotional level. Therefore, the damages of a psychosocial origin would be those negative consequences. For example, the exposure to stressful situations may cause stomach disorders, headaches, insomnia, anxiety, depression, alterations in the immune system, addictive behaviours, labour conflicts, etc., so that depression, anxiety, insomnia, etc., if of a labour origin, should not be considered psychosocial risks, but rather consequences of being exposed to the said risks.

On the other hand, we need to bear in mind here that it would be advisable not to make a univocal translation between exposure to psychosocial risks and mental pathology, because psychosocial risks entail harmful effects for health, but not only on a mental level. Moreover, this exposure does not always lead to mental pathology in a clinical sense.

We should also underline the impact that the exposure to psychosocial risks has upon other preventative areas which are apparently far from Psychosociology and its consequences, such as musculoskeletal disorders, risky behaviours, accidents linked to non-traumatic pathologies (cardiovascular problems), etc.

Obviously, the consequences arising from the exposure to psychosocial risks transcend individual health, and often we may speak of an impact upon the collective or organisational health. In addition, they impact negatively on the business results, undermine the personal commitment towards the organisation and entail a loss in human capital for companies and for society at large.

V. Stressors

In the psychosocial arena it is very common to speak of stressors, and in this regard we should specify what would be the preventative equivalent in Psychosociology: psychosocial factors?, psychosocial risk factors? or psychosocial risks?

When speaking of stressors from a preventative standpoint, we would be situated before working conditions that are inadequately designed and so become stress precursors. They would be psychosocial risk factors considered from the viewpoint of stress generators. Hence, we may build a conceptual equivalence between psychosocial risk factors and stressors, in the understanding that psychosocial risk factors involve a wider concept as potential generators of other risks such as, for example, Psychological Harassment in the Workplace (PHW), in addition to stress itself. As an example of this conceptual equivalence, in scientific literature we find authors who speak of psychosocial factors for stress and, for instance, the Joint Committee of the ILO/WHO on Work Medicine (1984), in its publication entitled "Psychosocial factors at Work: Nature, Incidence and Prevention", refers to *stressing psychosocial factors* (page 10).

VI. Stress

On multiple occasions, the exposure to psychosocial risk factors leads to a work-related stress situation. It is the most important and most prevailing psychosocial risk as is confirmed by national

and international sources of information, and in some studies even accounts for between 50% and 60% of lost working days (European Agency for Safety and Health at Work, 2014).

The European Commission, in its "Guidance on Work-Related Stress. Spice of Life or Kiss of Death" (1999), defines work-related stress as the *"emotional, cognitive, behavioural and physiological reaction to aversive and noxious aspects of work, work environments and work organisations. It is a state characterised by high levels of arousal and distress and often by feelings of not coping".*

Therefore, we are addressing a psychosocial risk which features a state of strain for a continuous period of time, stemming from a perceived overflow caused by the imbalance between the requirements and the demands (physical, cognitive, emotional, etc.) which the worker has to address, in relation to their ability to control their work and the available resources to deal with them, within a context that may have a deficit in social support and/or be characterised by an inadequate system of recognition or compensation. Underlying this conception of stress we find the most relevant explanatory theoretical models and with the highest level of implementation in the management of psychosocial factors up to the present (both in evaluation and in psychosocial intervention). We are referring to the Demand-Control Model (Karasek, 1979; Karasek and Theorell, 1990; quoted in Luceño, Martín, Rubio and Díaz, 2004), subsequently expanded with the Social Support variable (Johnson and Johansson, 1991) and Effort-Reward Imbalance Model (Siegrist, 1996, 1998; quoted in Luceño et al., 2004).

Therefore, we should remark that, from the preventative viewpoint, stress is not an illness, a psychosocial pathology or a mental disease, although it is usually considered as such. Quite another matter is the fact that people exposed to stress may fall ill and see their health affected on a cognitive, emotional, behavioural and/or social level, so that the exposure to stress situations may alter their way of thinking, feeling and behaving.

VII. Consequences of stress

As we have already stated in the previous section, if stress is understood as a psychosocial risk and is able, therefore, to negatively

affect workers' health, its consequences may materialise on a physiological, psychological (cognitive, behavioural and emotional) and social level. These would be damages of a psychosocial origin caused by stress. We should highlight, again, that we need to distinguish stress from its consequences, as we have detailed in the difference between psychosocial risks and its consequences.

Specific examples include tachycardia, attention-deficit disorder, addictions, depression or isolation. Likewise, the consequences of stress may go beyond the personal environment and cross into the organisational and social environment. For example, absenteeism, dereliction of duty, increase in claims, transfer requests, etc., may be valuable indicators of the existence of stress situations.

It is at this point that we may need to state which of these concepts should underpin the preventative management in the psychosocial environment and, more specifically, which of the aforementioned elements should be assessed; i.e., do we assess psychosocial factors, psychosocial risk factors, psychosocial risks or the damages and consequences of being exposed to the said risks?

Obviously, any of them are open to being assessed and evaluated, obtaining the relevant information in each case.

Hence, there are tools in the market widely used from different areas to measure, for example, stress or burnout, as well as tools that value the consequences for workers' health of being exposed to the said risks, for example by means of perceived health questionnaires.

Nevertheless, we need to clarify that the target of the so-called "psychosocial risks' assessment" is to ascertain which factors are responsible for the occurrence of these stress situations, PHW, burnout or any other psychosocial risk situation in an organisation; i.e., **the targets are predictors or indicators which, if present, would indicate a high probability of leading to a psychosocial risk situation with major consequences for health.** Therefore, what should be understood by "psychosocial risks' assessment" is an assessment of psychosocial factors, as we have already defined above. In other words, the purpose is to assess psychosocial working conditions which may be the subject of intervention.

Solely after assessing and evaluating these predictive working conditions would be we able to intervene upon and optimise by means of planned psychosocial intervention. This is the only way to meet the ultimate goal of this technical-preventative subject: to optimise the workers' psychosocial health.

3.2. Basic concepts in methodology: Some guidelines

I. Method, research technique and measurement tool

Assessing psychosocial risks and analysing the relevant data to valuate psychosocial factors may be undertaken by different research methods, different research techniques and different data collection techniques. But it is important not to confuse terms: an adequate distinction between them shall be highly important in order to be able to perform a reliable and systematic study of the situation.

The term ***method*** means a research procedure according to which the researcher or assessor undertakes the actions required for empirical testing the relationships between the variables set forth in the working hypotheses (Drenth, 1984; Sundstrom and Sundstrom, 1986; Yin, 1984). Depending on the subject of study, we may choose different method categories: **experimental, survey, observation or case methods** (we should not confuse the observation method with the data collection by observation technique).

In turn, we may choose among different types within each method category (see chart 1).

<table>
<tr><th>Categories</th><th colspan="3">Types</th></tr>
<tr><td>Experimental methods</td><td>Laboratory experiments</td><td>Field experiments</td><td>Field research</td></tr>
<tr><td>Survey methods</td><td colspan="3">Systematic survey</td></tr>
<tr><td rowspan="4">Observation methods</td><td>Observation systematisation</td><td colspan="2">Degree of participation of the observer</td></tr>
<tr><td>Not systematised</td><td colspan="2">External or non-participating</td></tr>
<tr><td>Systematised</td><td colspan="2">Internal or participating</td></tr>
<tr><td>Highly systematised</td><td colspan="2">Self-observation</td></tr>
<tr><td>Case methods</td><td colspan="3">Single case design (intra-series, temporal inter-series and combined)</td></tr>
</table>

Chart 1: Research methods (own development).

When assessing psychosocial factors field research, within the experimental methods, and survey methods, are more often used.

In field research, the researcher's target is to analyse the relationship between predictor variables and criterion variables, but not in terms of cause-effect, but rather in comparative or co-relational terms. This is due to the fact that the predictor variables conditions are already set for the researcher. For historical reasons, ethical reasons or the very fact of not being modifiable, the researcher is unable to handle the predictor variables, in contrast with laboratory experiments and field experiments.

Survey methods are undertaken when it is relevant to analyse the prevalence of certain preferences, attitudes or problems (Drenth, 1984; Sundstrom and Sundstrom, 1986).

In the area of work health, survey methods are often used to analyse the workers' perception of the working conditions and environment. For example, the INSHT periodically undertakes a national survey of working conditions (the VII National Working Conditions Survey is the latest; National Institute of Safety and Health at Work, 2012c). The goal pursued is to obtain information from the workforce about their working conditions and environment, the consequences for their health, and the organisation of prevention within the company, in order to design and plan the prevention of occupational risks.

Research techniques respond to a procedure and a systematic way of assessing the different variables of study. According to Castillo and Prieto (1983) *an analysis technique cannot ever be a method, unless it is the only one used in the research process*. Different research techniques may be chosen within each research method.

For example, "method" and "research technique" have been used indistinctly in occupational risks assessment, particularly when the designation of origin of some occupational risks' assessment techniques are called "methods": the "L.E.S.T. Method", the "Causal Tree Method" or the "NIOSH Method". In the three cases, they are variable analysis techniques and, therefore, set forth a systematic procedure to assess the relevant variables. These research techniques may be used under different research methods, either experimental, survey or case method, etc.

As regards the ***measurement tools or data collection techniques*** we should highlight that, within the research techniques we may again choose different data collection techniques –also called measurement tools- in order to assess the different research variables. These techniques are systematic procedures for data collection and may be of different types: **physiological** (for example, EEG or scan); **biochemical** (for example, blood or urine test); **psychosociological** (for example, scales or questionnaires) and **observational** (for example, narrative records or coding schemes).

Consequently, in order to undertake psychosocial risks assessment we should, firstly, design the study choosing a specific *research method*, limit the variables, selecting a *research technique* and, lastly, choose certain *measurement tools* in order to obtain data relating to the study variables. With these we are ready to undertake the relevant statistical analyses.

The study performed by Di Salvo, Lubbers, Rossi and Lewis (1988) can serve as an example. These authors analysed among professionals the differences existing between men and women in the perception of the causes for work-related stress. The sample study included 85 women and 63 men aged 23 to 68. The subjects were asked what the causes for work stress might be, to which they answered generating 1,001 causes. Content analysis resulted in two large clusters: *work content,* the demands imposed by the work, and *work context,* the social and physical work context. The results showed that what most often generates stress for men are unpleasant tasks and other people's behaviours and attitudes. For women, what most often causes stress are power and work overload.

This study used an *experimental method*, specifically a field study; i.e., it was a transversal cross-sectional study (comparison of two population sections: men and women). The *research technique* chosen was the implementation of the sampling technique with research purposes, which provides for deciding upon a representative sample of men and women so that the variables alien to the study are controlled, while the *data collection technique* used was a systematised survey. Several statistical techniques, including cluster analysis, were subsequently applied in order to analyse data and assess the outcomes.

In psychosocial assessment it is important to distinguish between method, research technique and data collection technique. More often than not, and unless performed with scientific purposes, the research method used is a "*field study*", since the assessor does not handle the psychosocial factors and these are given in the work environment. As regards the research technique, we should highlight the analysis procedure consolidated by the INSHT (2005) or the ISPLN (Working group of the commission about psychosocial risk factors at work of the INSL, 2005) and which liaises with the recommendations set forth by the UNE-ISO 10667 standard: 2013 "*Assessment Service Delivery. Procedures and methods to assess people in work and organizational settings*". Lastly, as measurement or data collection tools we may choose between scales, questionnaires, tests or qualitative measurement techniques, as we shall see below.

II. Quantitative techniques: Test, scale and questionnaire

As we have mentioned above, there are different types of *data collection psychosociological techniques* which, sometimes, are confused, particularly in psychosocial risks' assessments, which is where they are most frequently used. The tests, scales and questionnaires are quantitative and structured data collection psychosociological techniques. In contrast to non-structured techniques, they define and determine the information to be obtained and set forth in advance in the data collection categories, and they are psychosociological techniques in as far as they collect information from the people exposed to a certain situation. But there are major differences between them:

In its literal sense, a ***test*** is a *trial*. In the words of Burgaleta and Fernández (1986), it is deemed as *an experimental standardised situation which stimulates a behaviour*. Hence, an individual is subject to an assessment trial and information about a construct, either on intellectual capacity, personality features, etc., is collected in the course of his/her behaviour.

According to the Guidelines on Test Use by the International Test Commission (ITC) (quoted above in chapter 2, stages 3 and 4) *testing includes a wide range of procedures for use in psychological, occupational and educational assessment. Testing may include*

procedures for the measurement of both normal and abnormal or dysfunctional behaviours. Testing procedures are normally designed to be administered under carefully controlled or standardised conditions that embody systematic scoring protocols. These procedures provide measures of performance and involve the drawing of inferences from samples of behaviours. They also include procedures that may result in the qualitative classification or ordering of people.

In Psychology there are several tests, such as the *Raven's Test*, which assesses the intellectual capacity non verbally, *Psycho-Technical Tests*, such as those used to assess psycho-technical capabilities to obtain a driving licence, the *Peabody*, a test designed to detect language difficulties and to assess the verbal aptitude and vocabulary, etc.

A ***scale*** is a data collection tool which provides for graduated quantification of the assessed variable, with two poles from the lowest to the highest value. Every scale item contributes to the measure of the variable intended to be assessed. It may be used to assess social phenomena, attitudes, etc.; for example, the *Rotter's Locus of Control Scale* (1966) which assesses the extent to which the events we experience are attributed to causes alien to oneself or to internal causes, such as one's own behaviour. An item sample would be as follows (one should choose between option A –internal cause– or B –external cause–):

A) *Ordinary citizens may influence upon the decisions made by the government.*
B) *This world is governed by the few people who are in power and the man in the street is unable to do much.*

A "scale" is also the way to answer the questionnaires; among them, the one most used is the Likert-type scale, which includes different answer categories with different gradual valuation.

In my work it is essential to use individual protection equipment (IPE)	A) Totally disagree.
	B) Disagree.
	C) Neither agree nor disagree.
	D) Agree.
	E) Totally agree.

Therefore, they include answering scales *from the Likert scale system to the use of dychotomic answers, or the use of multiple choice answers, combined systems and the seldom used ipsative, adaptative, situational, behavioural tests or the automated item generation (Nielsen, Randall, Holten and Rial, 2010)* (Guàrdia and Peró, 2010).

As regards the ***questionnaire***, it provides for obtaining data by means of a series of written questions. Questionnaires may have an open answer format and be used as a *qualitative data collection technique*; a closed answer format with dychotomic answering categories (for example, yes or no) or multiple answering categories (a Likert-type scale), which results in a quantification of answers. The questionnaire structure is usually multi-factorial, so that it assesses different factors with their own scoring.

As items assess different factors, in this case it is methodologically unacceptable to obtain one sole score from the whole set of items (Muñiz et al., 2001). On the contrary, the data collection technique would be a *multidimensional scale* in itself (because, in addition to obtaining a score from each factor assessed –sub-factor–, all of them contribute towards the measure of one sole factor and, therefore, a total score is obtained for the whole set of items).

There is a wide range of questionnaires used to assess psychosocial risk factors, and the most frequently used include those within FPSICO (version 3.1), developed by the INSHT, and within CoPsoQ-istas-21 (version 2), which corresponds to the adaptation into Spanish of the Copenhagen CoPsoQ. Both questionnaires are multi-factorial and measure factors; i.e., they comprise different scales so that each one assesses a certain factor.

But something important that prevention technicians and psychosocial factors assessors should be aware of is that *…the administration patterns may neither be modified gratuitously nor partially applied or modified* (Guàrdia and Peró, 2010). The internal structure of questionnaires (which comprise different scales) is set up according to a psychometric analysis which identifies the factors to be assessed and the items, with the relevant weights, included in each factor. Any change alters the questionnaire configuration, and the data obtained do not guarantee a reliable assessment.

III. Qualitative techniques

Qualitative techniques, sometimes called qualitative "methods", are used when we wish to go deeper into the results obtained in a quantitative fashion, or when the outcomes cannot be easily measured or translated into numbers. According to Cook and Reichardt (2005) *by quantitative methods researchers refer to random experimental or quasi-experimental techniques, "objective" pencil and paper tests, multi-varied statistical analyses, sample studies, etc. In contrast, qualitative methods include ethnography, case studies, in-depth interviews and participative observation*.

Consequently, they are not as such "methods", but rather data collection techniques. In the former, data are quantified and translated into numbers; in the latter, they are analysed qualitatively, using answering categories, analysing the semantic meaning of the answers, etc.

In psychosocial assessment, after applying some of the usual questionnaires and after having obtained the relevant quantitative scores, we may find it interesting to go deeper into some of the assessed psychosocial factors in order to implement the relevant preventative measures. For this purpose, it is useful to apply some qualitative data collection techniques. Among them, the most frequent ones are the interview –structured or semi-structured–, the focus group and systematic observation. With these techniques *everything said within a given recording environment which is relevant for the record target is analysed. The idea is that not everything included in the literal record of what one subject says about a given topic is relevant, and hence should be screened in order to extract what is critical to be taken into account* (Guàrdia and Peró, 2010), and the relevant computer programmes may be used for this purpose.

IV. Reliability, validity and appraisal of the measurement tools

Before using one or another measurement tool we need to make sure whether it is trustworthy; i.e., we must analyse its reliability and validity. The final stage when preparing and building the measurement tools is the assessment of the reliability and validity of the tool.

Reliability is the degree of accuracy that the measurement tool presents in order to measure the relevant target; i.e., how trustworthy the outcomes produced are. From a statistical viewpoint, there are several ways to calculate reliability: reliability index, homogeneity rate, equivalence rate and stability rate (Burgaleta and Fernández, 1986).

The ***validity*** of a measurement tool provides information of whether the tool really measures what it is intended to measure. In the UNE-ISO 10667:2013 standard (Spanish Association for Standardisation and Certification, 2013a, 2013b), validity is defined as the "*degree to which the interpretation and use of the assessment scores are consistent with the proposed purposes of the assessment and are supported by accumulated evidence and theory".* There are several types of validity. Particularly relevant in our area are the content, criterion, construct and predictive validity. The choice of a certain measurement tool may be relevant depending on the values obtained in some or other types of validity (Burgaleta and Fernández, 1986).

In any event, it is methodologically incorrect to use measurement tools whose efficacy level has not been tested; i.e., which have not proven their accuracy or reliability and their validity as measurement tools.

On the other hand, when we use a reliable and valid measurement tool, it produces scoring and values that should be assessed. For that purpose, we need to know in advance what the normal scores obtained are in the reference population. The ***appraisal*** of a measurement tool is the process of finding the normal values obtained in the reference population and which constitute the scoring standard for that measurement tool of a given variable. This way, we may compare the data obtained in our study with the data of the reference working population.

Consequently, we should not mistake the appraisal of a scale or questionnaire for its reliability and validity. Reliability and validity respond to the psychometrical properties of the questionnaire or scale in question and give us information of its degree of rigor to assess the factors to be assessed. Appraisal, however, refers to obtaining the ordinary scores of the reference population in the factor or factors to be evaluated with the relevant scale or questionnaire.

When applying one of the measurement quantitative techniques to a representative sample population we obtain some scores, but they should be assessed in relation to the values deemed adequate in the reference population. This allows us to observe whether the data obtained in the relevant assessment are better than, equal to or worse than in the reference population and, in turn, also provide for knowing the magnitude of the deviation from the scores. There are different ways of obtaining the appraisal for a normative group: chronological appraisals –mental age and intelligence quotient– quantiles or percentiles and typical scores –standard, uniform, T and D scales, stanines or enneatypes–. Thus, in order to obtain ordinary scores for the reference population in usual psychosocial factors measurement tools, experts have worked with population percentiles.

For example, the appraisal of FPSICO (versions 3.0 and 3.1) was obtained by transforming in percentile the direct scoring of each worker (National Institute of Safety and Health at Work, 2011). The risk assessment is analysed according to the percentage of workers who lie within the ranges defined pursuant to the given percentiles (table 1).

Percentile obtained	**Probability of risk**
Percentile $\geq P_{85}$	Very high
$P_{75} \leq$ Percentile $< P_{85}$	High
$P_{65} \leq$ Percentile $< P_{75}$	Moderate
Percentile $< P_{65}$	Tolerable

Table 1: Criteria to assess the probability of risk in a company according to FPSICO v. 3.1 (source: National Institute of Safety and Health at Work, 2011).

Therefore, when building scales and questionnaires not only should we analyse their reliability and validity, but also the appraisal process data in order to obtain the reference scoring.

3.3. Violence at work: Some guidelines

In this section we shall consider a series of questions related to violence at work. This violence may lead to exposure situations which may be categorised in the area of harassment, discrimination and aggression in various degrees.

By means of qualitative and quantitative techniques, in addition to other information items, we identify and differentiate the exposures and the risk factors of work-related violence.

Below we will comment upon some interpretation issues about the results of these psychosocial or first level assessments when applying the most commonly used procedures or "methods" in this type of assessments.

When using general assessment "methodologies" for psychosocial risk factors, may we understand this as a general or basic assessment of violence or harassment situations?

The general procedures for current psychosocial risks' assessment do not assess harassment in the workplace, but rather some precedent risk factors and also pose questions about the exposure to (psychological, physical, sexual, discrimination...) violence situations. Usually, work-related violence is not a specific dimension or area of analysis in the results of usual methodologies. At the most, some question is usually devoted to exploring the exposure in some fields of work-related violence. Therefore, the idea is that if the psychosocial risks' assessment process has been performed correctly, it will be interpreted that the said results explore in a generic fashion the potential exposure to the risk of psychological violence at work and a series of pre-existing aspects, such as, for example, conflicts, bad relationships with workmates, isolation, etc.

From general "methodologies" for risk assessment we may basically identify the potential existence of an exposure in progress and some factors that may be related to the appearance of the behaviours

of work-related violence, and also analyse some factors that may precede the occurrence of the exposure thereto.

When the results of this type of assessment evidence a potential exposure to violent behaviours at work, the said risk needs to be studied further. We should confirm the exposure and establish whether it may also entail a condition of Psychological Harassment in the Workplace (PHW), with the specific features of these cases (see National Institute of Safety and Health at Work, 2009c).

The PHW research processes, described in many cases in the PHW standard operating procedure of companies and institutions, attempt to confirm whether all the elements which should be present to qualify the situation (from the POR standpoint) as harassment in the workplace are there. The process of assessing a potential exposure is a reactive analysis, both of the potential consequences (if there is evidence of its existence or past existence) and of the associated or triggering factors for the appearance of the risk. It is not, therefore, a risk assessment.

These research procedures, in contrast to the risk assessment procedures, are not standardised in their methodology, but rest upon:

- collecting information and comparing documents related to different elements involved in the exposure;
- analysing the consequences of the exposure;
- using questionnaires and inventories;
- implementing qualitative techniques for information collection such as interviews and group techniques, etc.

What are the organisational or psychosocial risk factors of the general “methods” related to the Psychological Harassment in the Workplace?

Risk factors are those psychosocial conditions of jobs which, in this case, act as boosters, triggers or precedents of violent behaviour. They are usually studied through quantitative assessment “methods”

for psychosocial risk factors. The ways PHW relate to the psychosocial factors which are analysed in these assessment "methods" may be diverse and are not sufficiently developed to accurately establish the said relationship (and its direction) for preventative purposes.

Workers who state their exposure to violent behaviours of different types usually evidence other organisational conditions associated to this situation. These organisational conditions are usually better evidenced through different information capture procedures used within the assessment process (the company's organisational documents, work environment studies provided by the company, use of qualitative "methodology" for capture or confirmation, etc.).

Among the psychosocial risk conditions which interact as triggers or fosterers of the PHW, and which researchers have observed in the last few years, we should highlight the following:

- poor relationships between employees and managers;
- poor relationships among employees;
- lack of co-operation in the performance of work;
- inter-personal conflicts;
- inadequate, negative or non-existing communication between peers;
- organisational change contexts (sudden organisational changes, lack of stability and re-structuring);
- multiple hierarchies;
- poor or non-existing flow of information within the company;
- organisations that do not disapprove of psychological violence behaviours;
- negative social work climate;
- attitudes of generalised individualism;
- extreme levels of work demands or environments with a work overload (for example, time pressure);
- leadership models with authoritarian or *laissez-faire* managerial styles (neglecting management responsibilities);
- very competitive promotion systems.

These aspects have an impact upon a greater lack of protection of the workforce vis-à-vis potential harassment at work situations. They should be identified in the initial assessment of psychosocial risks in order to study, to further value and to propose the suitable corrective measures. When an assessment produces results (descriptive or value) of exposure to violence at work, we should review other organisational factors in order to establish, as a working hypothesis, what psychosocial elements present among those contemplated in the psychosocial assessment tools might be being used as undue pressure upon the worker, particularly if workers state that they are exposed to PHW behaviours. From a preventative point of view, it is obvious that if these risk factors are eliminated or minimised, a PHW situation will be highly unlikely. In general, PHW is minimised by improving the psychosocial conditions at work.

Notwithstanding the foregoing, we should bear in mind that in the field of PHW there is the will of the human being to decide whether to behave violently towards others and, in this sense, anticipating an exposure to PHW is not always possible. In many PHW conditions, harmful work psychosocial situations (by way of overload or underload of work, isolation, ambiguous roles, conflicting roles, etc.) are used (from the position of power held by those who are violent to others), either wilfully or negligently, as tools of violence against the worker. Therefore, we need to check, from a specific subsequent analysis of work-related violence, whether these behaviours are a process of exposure to PHW (see National Institute of Safety and Health at Work, 2009c). Consequently, organisations should have operating procedures against PHW intended to correct, from the early stages, any exposure that may occur.

The specific case of interpreting scores in relation to the risk of PHW in FPSICO 3.1.

Below we present a series of answers to a series of questions received by the INSHT referring to the use of FPSICO (versions 3.0 and 3.1) and certain results obtained in ….

1- What should be done when there is evidence of some psychosocial risk factors previously related?

If the results of the assessment related to the PHW, obtained in either FPSICO profile and contained in the "Relationships and Social Support" factor, are situated in areas of moderate risk (yellow colour), high risk (orange) or very high risk (red), we should deduce that they may be related to the appearance of violent behaviours or potential processes of harassment in the workplace. We would have to go deeper into the study to confirm or rule out the potential exposure, as the case may be, or to act upon other risk factors that are causing those results in the "Relationships and Social Support" factor.

At first, the risk of harassment in the workplace will depend on whether there are specific results basically in questions 17-20 of the questionnaire. In such an event, corrective actions should be established upon those aspects identified, as they are aspects which, secondarily, from the standpoint of work-related violence and harassment processes, in particular, are elements usually used against the worker.

2- What should be done if we receive "2" or "3" (fair or poor) answers to item 17, or "frequently" or "constantly" in item 18a or "let the people involved solve the issue" in item 19[2]?

In these cases, we should verify administrative or organisational data and consider using qualitative tests, such as interviews or group techniques (depending on the specific case) in order to identify more accurately whether this risk is expressing work-related violence or if this risk may be preventively corrected by changing the precedent risk factors (by modifying those aspects of work organisation that act as triggers). The fact that personal relationships are poor, that there are conflicts or that there are no problem-solving procedures is not an unequivocal indication of exposure to violence or harassment in the workplace. In these cases, preventative recommendations will attempt to tackle these risk factors. If, in addition to these answers, the graphic profile in the "Relationships and Social Support" factor appears in a risky area, corrective actions should be implemented

[2] The computer application FPSICO 3.1 considers this item 19 only on a descriptive level; i.e., its results are not included in the calculation of the average, median and standard deviation.

upon those factors, fostering aspects that may protect, eliminate or minimise those which may trigger the appearance of situations of PHW.

In such event it would be desirable to confirm, with qualitative "methodology", that there are no exposures to violent behaviours or harassment in the workplace. Any indication of exposure would entail enabling research procedures.

3- What actions are recommended if answer "2" or "3" (frequently or constantly) is given to items 18b, 18c and 18d, or if in question 20 the answer is "always", "often" or "sometimes"?

We should bear in mind that psychosocial risks' assessment with procedures such as FPSICO 3.1 or other similar ones is useful to identify risk factors for violence and potential exposure. We need to further investigate this risk when questionnaires evidence answers of exposure to violence (it would be enough to mention exposure in only one of the applied questionnaires). The outcomes obtained by implementing general tools to analyse the psychosocial conditions at work will give rise to the need to perform some more specific research about the identified risks of work-related violence which should be studied, confirming exposure, determining the type and scope, and proposing (reactive and preventative) corrective measures.

The exposure to psychological violence at work may also be identified by other means different from implementing quantitative "methodology" of a general "method" of psychosocial risks' assessment. Hence, the information that may allow for identifying the said risk may come through the worker him/herself, managers, OSH workers' representatives, a peer, etc., or by means of procedures implemented within the internal management system.

When we obtain answers in items 18 and 20 in FPSICO 3.1 such as the ones mentioned in the question, we may suspect, from the answer percentages to the aforementioned items and analysing the scales (by group or one by one) that there may be direct exposure of the worker to psychological violence at work (including the violence inherently involved in the exposure to discriminatory behaviours). In this situation we suggest the following proposals:

A- To identify which group(s) and/or jobs within the company are or may be exposed to violent behaviours, psychological harassment, sexual or discriminatory harassment, and consider those exposures in order to reactively eliminate them immediately.

B- After identifying them, we should consider that there may be agreed procedures with participation within the company which lead the way to perform the research and which shall establish whether there has been harassment in the workplace or what type of exposure to violence has occurred. The idea is to research into the exposure and its consequences. We should underline that, being a work-related risk, the PHW is not absolutely foreseeable. In this research process we need to have additional mechanisms for identification (for example, by adequately using the "PHW Incident Journal" by the National Institute of Safety and Health at Work, 2010b), and action procedures in the occupational risks management system.

If the organisation already has these operating procedures, well-designed, in place which ensure the rights for all stakeholders and are functional for these cases (physical violence, psychological violence and harassment in the workplace, discriminatory harassment and behaviours, etc.), they should be easily enabled and used by the workforce. If these procedures are not available or the worker does not want to pursue the mandatory complaint, the employer or entrepreneur (depending on the preventative organisation available), through a POR technician specialised in Ergonomics and Applied Psychosociology, should research whether the risk exists, the exposure procedure and what steps should be taken. All this without prejudice to the steps taken by the employer and/or his/her delegate (Human Resources Department) as other work-related rights, alien to the work health, may be breached in this type of situations.

Harassment is an exposure to psychological violence at work which meets specific criteria (see National Institute of Safety and Health at Work, 2009c). We should note that by implementing only one questionnaire-type analysis tool we will be unable to establish the exposure to the risk. As already mentioned, in order to confirm this

exposure we should undertake a study or research process which may establish (by non-mechanical interpretation of the outcomes) whether the PHW exposure really exists.

There are different "methods" and tools used in the process of studying the PHW, including the following:

- SATA (Spanish acronym for Triangular Harassment Analysis System), by Sebastián, Cárdenas, Llano and Almanzor, 2007. SATA 3.0 (Interpersonal Conflict, Harassment in the Workplace and External Violence in Work Settings), by Sebastián and Jiménez, 2014.
- LIPT-45 (Leymann Inventory of Psychological Terrorization), by Leymann, 1990.
- LIPT-60, the Spanish version of LIPT, by González de Rivera and Rodríguez-Abuín, 2003.
- CAPT (Spanish acronym for Psychological Harassment in the Workplace Questionnaire), by Moreno, Muñoz, Gamarra and Herrer, 2007.
- EAPA-T (Spanish acronym for Scale for Work-Applied Psychological Abuse), by Escartín, Rodríguez-Carballeira, Gómez-Benito and Zapf, 2010.
- IVAPT-PANDO (Spanish acronym for Inventory of Violence and Psychological Harassment in the Workplace), by Pando, Aranda, Preciado, Franco and Salazar, 2006.

Availing ourselves of the psychosocial risks' assessment, of the interview tool, of the documentary analysis of the data relating to the identified case, of the cooperation of the monitoring health service in the study of the consequences of the exposure and of tools such as the aforementioned ones, we will be able to tackle the research or study of a case with signs of being or having been exposed to psychological violence behaviours at work or PHW.

Due to the specific and complex nature of the risk, the research should be performed by an expert trained in these risks (in practice it is not usually enough to be an expert in Ergonomics and Applied Psychosociology in order to undertake this kind of work). In common practice the specificities of each case prompt the use of different

procedures and strategies. At present it is impossible to prescribe or rule, in a standardised and accessible manner for less specialised technical personnel, a study "method" for undertaking the study of these cases without insurmountable uncertainties.

Cooperation with Health Surveillance

When assessments evidence this type of exposures, it may be useful to compare these results with other data about health consequences available at Health Surveillance, in general referring to symptoms compatible with exposure to violent behaviours or harassment in the workplace. Obviously, this work should be lead by the Health Surveillance Division.

There are plenty of general health questionnaires and "methodologies" to examine these aspects. From a technical standpoint it is possible to verify, with informed consent and by way of an anonymous and collective check-up, potential psychosomatic manifestations (non-specific symptoms of a psychosomatic character arising from a stress response). We would need to study potential relationships that these stress responses may have with the psychosocial working conditions existing in the relevant jobs —FPSICO 3.1 or other assessment procedure— in terms of exposure to violent behaviours.

In order to assess these situations of risk and to identify whether there is an exposure we need to compare the data about health consequences available at Health Surveillance with the outcomes of the assessment (in terms of risks of violence at work) and the use of complementary contrast qualitative "methodologies".

3.4. The UNE-ISO 10667 standard "*Assessment Service Delivery. Procedures and methods to assess people in work and organisational settings*" and the management of psychosocial risk within organisations

As the Spanish Association for Standardisation and Certification (AENOR) explains in its web page (http://www.aenor.es), a standard is a technical document designed for voluntary use which results from consensus, based on the results of experience and technological development and approved by a recognised standardisation body (in this case, by ISO –International Organization for Standardization- in 2011 and adopted as a UNE (a Spanish Standard) Standard in 2013).

At present, there are UNE standards for almost everything, even for the requirements that baked clay figures in Christmas nativity scenes should meet. Several of them are addressed at standardising products, processes and services related to safety and health at work, but the number of them which deal with Psychosociology applied to prevent occupational risks is very limited. The most well-know is, no doubt, the UNE-EN ISO 10075:2001 standard about ergonomic principles related to mental workload, comprising three parts.

Although their use is not compulsory, these standards may sometimes become incorporated into legislative tools by reference. This is not the case for the PSR, although the wording of article 5 proposes, as a means to undertake the legal obligation of assessing occupational risks when a specific regulation is lacking, the implementation of UNE standards, among others.

It is widely known that there is no "*specific regulation*" regarding the assessment process of psychosocial risks or factors (in this section we will use both terms as synonyms, although the differences between them have already been explained in section 3.1 above). Therefore, we may not disregard the recently-published UNE-ISO 10667:2013 standard entitled "*Assessment Service Delivery. Procedures and methods to assess people in work and organisational settings*", which describes and guides the processes of psychological assessments in work settings, not focusing solely on psychosocial risks' assessments.

Below we raise a couple of questions related to this UNE-ISO standard.

Is it useful in the field of Work-Related Psychosociology?

One aspect that should be clarified before we go into further detail about this standard is that, although its title reads "*Procedure and methods to assess people*", its *Introduction* clearly states its implementation for assessments in a wider sense, providing for individual assessments of employees, group assessments and assessments of the organisation. In addition, in the section entitled *Terms and definitions*, the UNE-ISO 10667:2013 standard applies the term "*client*" also to the organisations which require assessments of themselves, noting, among the relevant examples, the "*assessment of working conditions.*" Consequently, it is clearly possible to implement the UNE-ISO 10667:2013 standard in the area of prevention of psychosocial risks in those aspects that may be relevant. This is also the opinion of Picazo and Barbero (2013) and Peiró, Yeves and Lorente (2013).

This new standard aims to promote good practice regarding the psychosocial assessments performed in work and organisational settings, providing a clear and brief guide for the clients and providers involved in the supply of assessment services. It describes their respective obligations and liabilities before, during and after the assessment procedure.

Precisely for this purpose, the standard is structured in two parts. The first one deals with the "Client's Responsibilities", the client being the person who makes a decision to entrust a service provider with the said assessment services. Applied to our preventative terminology, a "client" would be the organisation that commissions the performance of an assessment of psychosocial factors.

Part 2, dealing with "***Requirements for service providers***", establishes the requirements and guidance for the people who provide the assessment service, both belonging to the client organisation itself (in our case, in-house or joint prevention services or designated workers) and being members of external companies,

outsourced prevention services. Although it describes the basic rules for selecting and employing the materials to be used, the standard does not propose specific assessment "methods" or procedures. According to Barbero (2014), the technical aspects of the procedures and assessment used should be ensured by the professionals who undertake the assessment process, who should have sufficient theoretical and practical training for that purpose.

The adaptation of psychosocial factors assessment processes to the guidelines set by this new tool will virtually completely ensure compliance with the legal requirements and technical criteria in force.

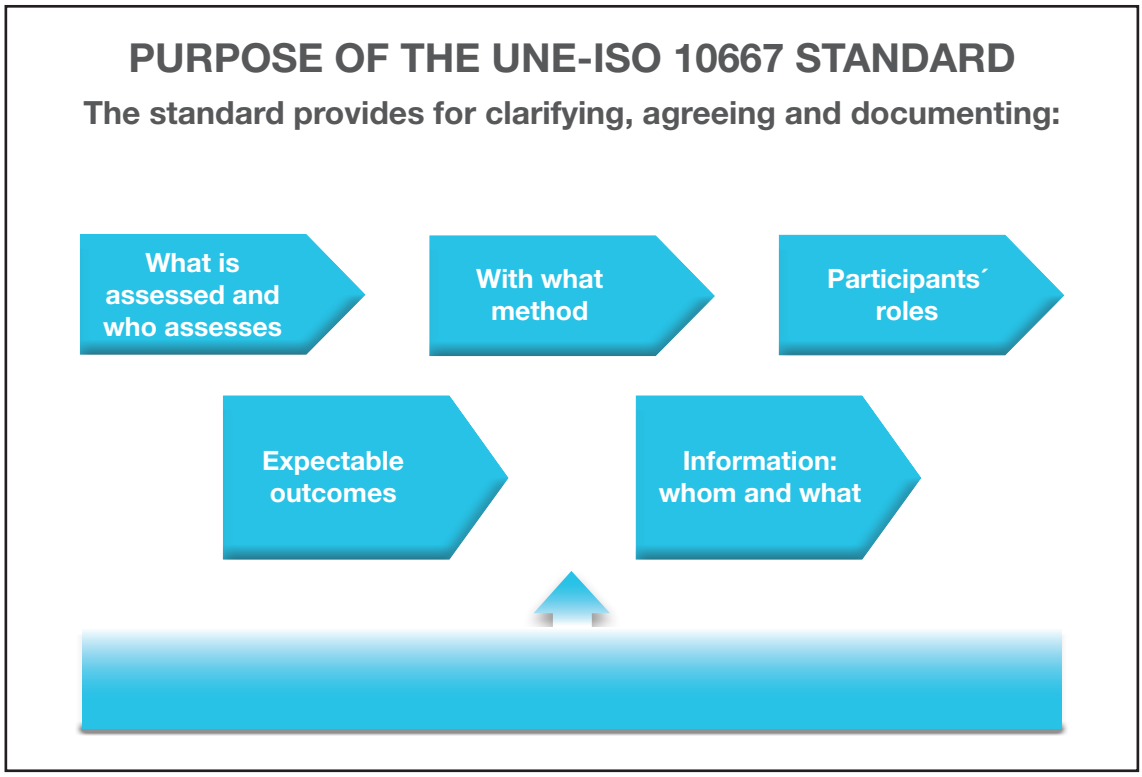


Figure 4. Purpose of the UNE-ISO 10667 s tandard. Adapted from the Second Course-Workshop on the UNE-ISO 10667 standard, taught by the Official College of Psychologists of Madrid (Colegio Oficial de Psicólogos de Madrid) (January-March 2014).

What interesting aspects are included?

Firstly, the definition provided by the UNE-ISO 10667 standard: 2013 for the term "*assessment*" is aligned with the one set forth by the PSR (article 3) for the assessment of occupational risks. Both include the idea of assessment as a systematic process or procedure for action. Hence, the standard divides this process into four stages, dealing with each one in a different chapter:

- agreement procedures;
- pre-assessment procedures;
- assessment delivery;
- post-assessment review.

The basic actions included in each of these stages are also present in the basic POR regulations and in different guides and other technical documents by Work-Related Psychosociology experts and specialised bodies.

Secondly, we should particularly highlight the third stage of the process, called "*assessment delivery*", as it covers all the activities relating to the preparation and performance of psychosocial assessments and presents a process which is very similar to the stages that the INSHT (2005) calls "*Planning and performing the field work*", "*Methodology and techniques implementation*" and "*Analysing the results and preparing the report*", and which are referred to by the INSL (Working Group of the Commission of Psychosocial Risk Factors at Work, 2005) as implementation of the "*assessment methods*", "*data analysis*" and "*performing the report and presenting the results*".

It is clearly stated that seven steps should be undertaken during the "assessment delivery": 1) planning the assessment; 2) informing relevant stakeholders about the assessment procedure, the confidentiality of the data to be given and the anonymity conditions to be met in the outcomes reports; 3) conducting the assessment; 4) interpreting and use of the results; 5) preparing and providing reports; 6) providing feedback to assessment participants; and 7) continuous evaluation of the assessment process (see figure 5).

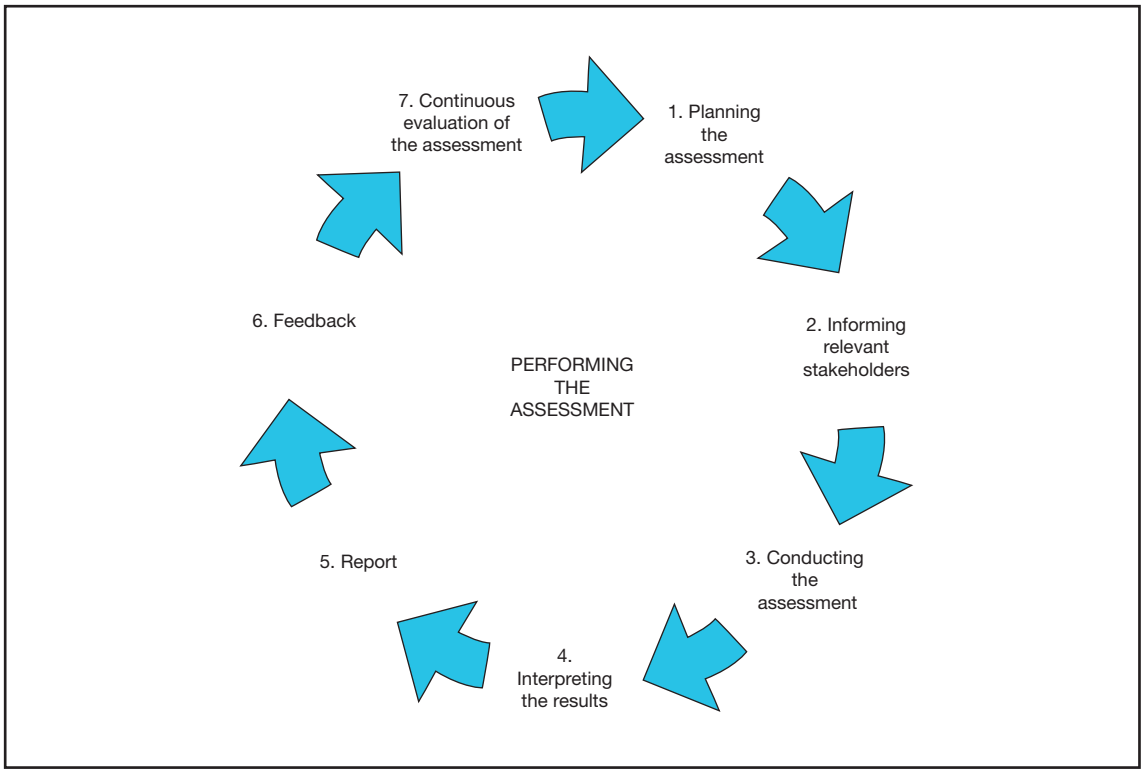


Figure 5. Assessment delivery steps. Adapted from AENOR, course TR-04, ISO 10667 standard to assess people in work settings (Madrid, February 27th 2014).

As regards section 6) providing feedback to assessment participants, we should note that, in the field of POR, this is the right time to *…directly inform each worker of the specific risks that impact their job or function and of the prevention and protection measures applicable to the said risks* (LPOR, article 18.1).

Also at this stage it is interesting, as a contribution to be taken into account in preventative actions, to supervise and control the assessment process during its own development.

Thirdly, we should highlight, as Gestoso and Barbero (2013) have done, the importance given by the standard to collaborative work between the service provider and the client; in our case, between the company or body and the prevention service, and how an express "agreement" procedure between them is established in a detailed fashion which, in preventative terms, is the preventative action agreement governed by article 20 of the PSR. In this regard we should highlight that the standard goes far beyond the law by also requiring this "agreement" when the service provider belongs to the client's organisation. In any event, meeting the technical requirements

included will provide for greater involvement and active participation by the company management in the whole process of psychosocial risks' assessment.

Another aspect that should be highlighted is that it also provides guidelines about the rights and responsibilities of assessment participants and of other parties involved in the assessment processes, such as the addressees of the assessment outcomes. Hence, for example, the client, i.e., the employer, should ensure that assessment participants have been provided with information of what is expected of them during the assessment process and that the relevant informed consent has been obtained (defined as the action of informing the assessed person about the assessment, its goal and potential consequences, and that their consent needs to be given in order to take part in the assessment process).

The standard also makes the distinction between "assessment administrator" and "assessor". While both parties are responsible for performing the assessment, the assessor is also responsible for making decisions about the use and interpretation of the assessment procedures, for providing appropriate reporting and feedback to the client and assessment participants. What is also very useful for the area of prevention of psychosocial risks is the need for competent professionals to be able to provide feedback commenting the results in a constructive and positive fashion.

As far as the preparation and presentation of reports are concerned, the UNE-ISO 10667:2013 standard includes a series of specific guidelines that, if adopted in the psychosocial risks' assessment reports, will lead to an outstanding increase in their technical quality (annex D of the standard provides a series of recommendations in this regard). We should bear in mind the reference made to the limits of the automated computer-generated reports.

Finally, the fourth and last stage, the "post-assessment review", may be partly assimilated to the mandatory review of the assessment provided by article 6 of the PSR. It deals with the appropriateness of reviewing the assessment process in order to check whether the results, the consequences and the usefulness of the assessment have met the needs and whether the purposes of the process have

been reached and, if applicable, to ascertain what changes the client should include in the assessment process in the future. In contrast to the POR regulations, this post-assessment review is not mandatory, and should only be undertaken if so agreed by the client and the service provider. The technical specifications included in this regard may also be useful for professionals of the POR area, after performing the risk assessment.

Pursuant to the foregoing and to some other aspects which have not been detailed to avoid the document being too long, we conclude that, if this UNE-ISO 10667:2013 standard becomes incorporated into psychosocial risks' assessments in all that may be implemented and useful, in turn this will improve the technical and objective quality assurances of the assessment undertaken, thereby providing the client with solid assessment-results foundations for decision-making, arising from a rigorous methodological process governed by the law in force. The confidence that this may develop both in company management and in the workforce and their representatives may contribute towards the management of psychosocial risks not being relegated, as sometimes happens, to a mere bureaucratic compliance intended to prevent potential penalties for legal breaches.

4. FINAL REFLECTION

As Diogenes of Sinope said long ago, *the existence of movement is simply proven by walking*, and more recently Antonio Machado wrote *Walker, there is no path, you make the path as you go along*. And although in our field of study a way has been walked and there has been movement, it is not less true that over the last few years the path has grown wider and the movement more intense, probably thanks to the boost given by some initiatives, campaigns (EU-OSHA, SLIC,…), work or research groups, strategies, publications, etc., and possibly also, there is no reason not to point this out, by a broader view from different actors – public institutions, social agents, prevention professionals, etc.– which intends to reduce the gap existing between this type of risks and more "traditional" ones.

In this described setting, it is important that all of us who have something to contribute in the field of Psychosociology understand that we need to take advantage of the wickers available to make a beautiful but also solid basket. The areas of work are numerous (Sánchez and Lara, 2014): the greater consideration given to these risks in safety and health at work strategies; the improvement of the information / indicators about the psychosocial activity developed in our country; the improvement in specific research lines; greater homogenisation of specialised training taught; the increase in the number of activities to foster the decrease of psychosocial risk, as well as the number of information, assistance and guidance activities, etc.

Let us hope that the path to be walked –which, let there be no mistake, will at times be plain and easy and at others stony and bumpy– is fruitful for the sake of everybody: the workforce, employers and society at large.

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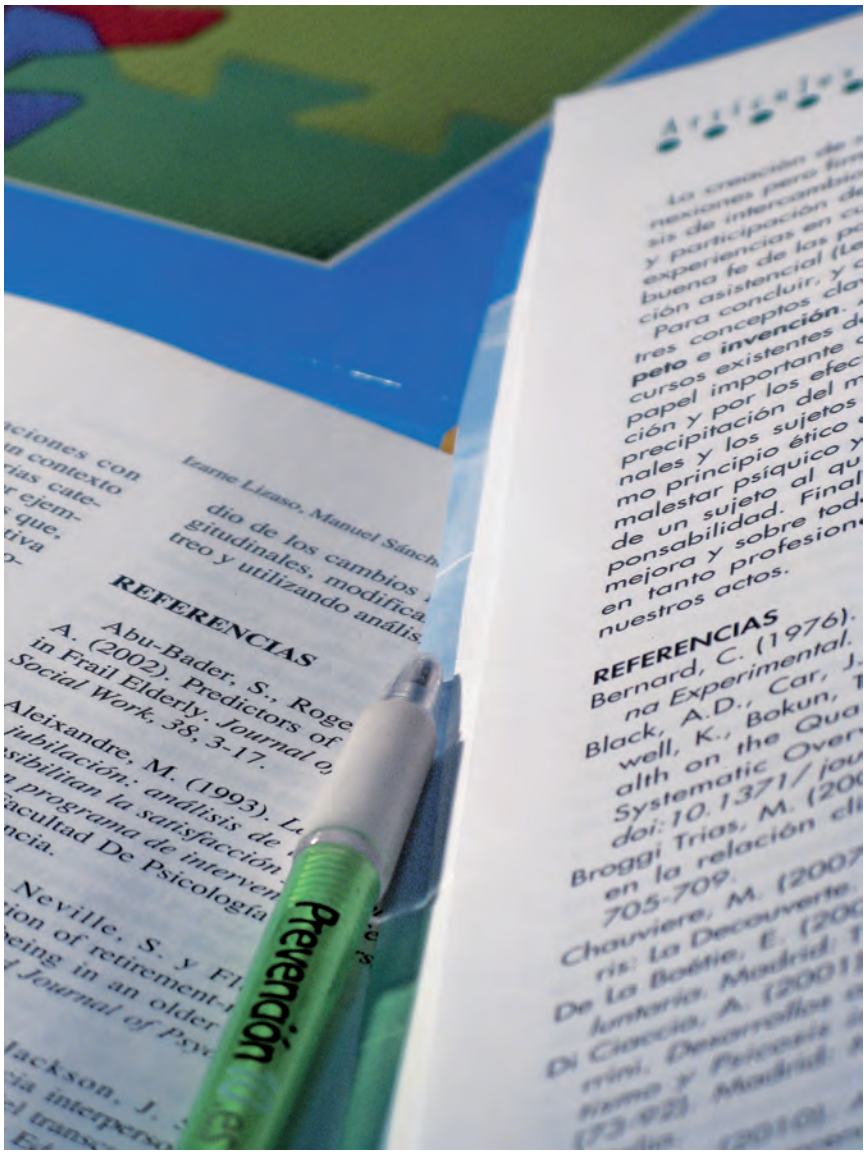

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