

PROJECT

PRO-MOTION.

SENSITIVE CAREER MANAGEMENT

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Introduction to the research project and the workpackage 3

The main aim of the “Pro-motion. Sensitive career management” project (hereafter also Pro-motion) is to provide new answers as well as solutions in terms of professional career management for young graduates, long term unemployed and also professionals at risk of burnout, depression, working under stress and others risk factors at the workplace (e.g. drugs addition, somatic illnesses).

Building on most recent and strong evidence the consortium would like to develop innovative methods of career management (vocational advisory) to challenge the problem of skills mismatches at labour market, risks of exclusion at work, or even school environment by delivering tools, methods as well as supporting materials which can be widely used from vocational schools to professional HR agencies/departments.

Main objective of the Pro-motion project is to develop innovative model of work, with students/people with high sensitivity which will be useful in effective career management.

Specific objectives are:

- Development of the model of support of highly sensitive people in their career development,
- Development of the innovative vocational guide: matrix of competences in comparison to vocations considering management of the employees/future employees potential and HR management.
- Development of innovative tool which support recognition of the highly sensitivity and its' influence on the professional development,
- Development of the educational materials for students, employees and teachers/HR departments which can be used in effective career management.
- Development of podcasts (videos)– as supporting materials for employers/HR departments. These materials will be published on project website.

In the bigger picture the project's idea is will deliver a solution of work - life balance, especially for people with high sensitivity and follows the recommendations of European Parliament illustrated in New Skills Agenda for Europe 2016.

Target groups of the Pro-motion project are:

- VET students and young graduates: the tool as well as materials, methods of work will help them to recognise their level of sensitivity and confront it with the possible career development.
- Unemployed people, especially long term unemployed or people who cannot find stable workplace – as the tool, guidance materials will help them to understand what kind of work positions would be the most suitable for them.
- Employees – especially at risk of burnout, depression, as for them understanding of their strengths and weaknesses considering traits of temperament will help them define risk factors related with their temperament, define more suitable work environment or work responsibilities and consequently be more conscious of own career management.
- All type of public institutions – like employment agencies, offices, private HR companies working with unemployed or as a recruitment agency for employers.

On the other side results and findings of the project will be beneficial for all professional groups working with 1-3 groups:

- 1A VET teachers, school advisors, vocational advisors, psychologists – working at schools. Depending on the country legislations there are different type of experts working in school environment. They will be able to use tools, methods to identify the strengths of their students and use working methods of pro-motion towards better, more effective, and more aware professional career development.

- 2A Professionals – coaches, vocational advisors, teachers at adult schools working with unemployed people, PES offices, who will gain additional tools and methods of the guidance of highly sensitive customers.
- 3A Employers: among the top work skills today's employers want nowadays: flexibility/adaptability, effective communications skills, problem solving, creativity, interpersonal skills, teamwork can be found in national reports as well as European Commission's articles related to labour market. Better assessment of the employees' competences will help to understand employees' behaviours at workplace.

The idea of the project tackles the problem of mismatches of skills – considering lack of self-awareness and understanding of the employee by the environment. Wrong decisions related to career plans, especially for highly sensitive person can be a risk factor of the future problems and not being suitable for the workplace or employer's expectations.

Content development of the project results will be based on activities described in work packages 3-preparation, 4 – implementation and 6 evaluations, which will result in main deliverables:

- innovative vocational guide: matrix of competences in comparison to vocations considering management of the employees/future employees potential and HR management.
- online assessment tool
- guidebook and supporting materials for vocational advisors
- guidebook and supporting materials for employers
- model of support of highly sensitive people in their career development,

The aim of the preparatory action planned in the work-package 3 is to prepare theoretical background for the further implementation of the project. The purpose of using this analysis technique is to need assessment and need-gap analysis in career counselling. Within the work package 3 interviews with employers and employees are planned as well as a desk research – analysis of the temperamental traits and its influence on labour market (meaning of temperamental trait for career design and being on the labour market). These activities will lead to development of the innovative vocational guide: matrix of competences in comparison to vocations considering management of the employees/future employees potential and HR management, which will lead to development of the tool, supporting materials for VET teachers, school advisors, coaches of career development, and a comprehensive model of support students/people, especially representing group of HSP people on career management.

The objectives of the work package 3 are:

- To organise cooperation structure among project partners and employers/employees
- To define gaps in vocational counselling/ relation between high sensitivity and the workplace/management of vocational career
- To define state of art in vocational counselling, tools used – considering temperamental traits (particularly high sensitivity).

The WP leader is the metropolitan City of Rome who will be responsible for the task division, preparation of the time plan of all activities and preparation of the summary of the desk research and monitoring preparation of guidelines for Co-leaders of WP2.

Work package tasks are:

3.1 Desk research – all partners will prepare desk research on state-of-the-art of managing high sensitivity in the labour market

WP3 leader will prepare template for the delivery of national parts of research and will prepare final consolidates summary of the most important findings.

Tasks 3.2 – 3.5 will be implemented in all partners' countries to gather wide range of information, from different geographical areas. Before implementation of each task there will be detailed work plan/instruction prepared for all partners in order to gather comparable data.

3.2 Interviews and focus groups with employers

3.3 Interviews and focus groups with employees

3.4 Consolidated report based on interviews/focus groups with employers

3.5 Consolidated report based on interviews/focus groups with employees

Employers and employee will participate in project activities on voluntary basis. After the tool and materials of PRO-MOTION will be ready to use, all participants of focus groups and interviews will have full access to all materials and additional counselling of project staff.

1. The Pro-motion desk research

About 20 per cent of all individuals are highly sensitive to the perception and processing of environmental stimuli. For example, highly sensitive individuals react to even the smallest details and changes in their environment. They are also considered to be very empathetic and conscientious. At the same time, the high level of sensitivity some people possess can be accompanied by stress.

Introducing sensitive career management is a complex project with innovation factors that consist of state-of-the-art techniques in fields such as human resource management, psychology, leadership, organisational behaviour, communications, and knowledge transference as well as adult pedagogy. Such a comprehensive, multifaceted approach draws expertise and supports from those sciences, and requires the development of a framework complying innovation and vanguard knowledge and means that were designed to determine the key competencies needed for sensitive career management.

Thus, the project starts with desk and on-field research activities to define the knowledge basis on which building the whole project structure.

Workers' recognition of their own personal temperaments will contribute to self-care, and to the awareness of their potential, and relief from occupational stress. Workplace assessment and identification of temperaments, and recognition of these temperaments' effects on career by workers themselves, and by co-workers and supervisors, will facilitate environmental coordination of individual temperaments.

According to Acevedo et al. (2014), knowledge about sensory processing sensitivity is still evolving, and there is growing evidence of social advantages of sensitivity. Although SPS can lead to some challenges of overwhelm, the positive aspects of sensitivity can be seen as useful for life-long learning and career development (Gregory et al., 2010; Smolewska et al., 2006, Cater, 2016).

1.1. Objectives and research questions

The aim of the start-of-the-art analysis (SOTA) is to identify best practices in the career management of highly sensitive persons, competencies for sensitive career/vocation management, training programmes for sensitive career management.

Project activities included state-of-the-art analysis in partners' countries (Poland, Italy, Portugal, Romania, Norway, and Spain), EU, USA, Canada, Australia, and New Zealand. Each partner provided a summary of literature and collection of case studies of companies that applied tools and rules to manage highly sensitive persons' career and guarantee the organisational well-being with particular attention to different work-related stress' effects impact depending on different sensibility). This phase also considers which indicators need to be collected, monitored, and evaluated to calculate the business case/economic evaluation. Simultaneously to the literature study also empirical research will conducted through the development of focus groups. To gather data directly from the organisations (employers and employees), focus group will be carried out and data analysed.

The final report will be developed after matching both empirical and literature data, which contributes to the training framework and learning outcomes matrix that will be used to guide all development actions: (1) matching empirical and literature data led to the definition of the sensitive career/vocation manager professional profile and Training Curriculum; (2) Main competencies that the sensitive career/vocation manager should have and/or acquire through a training course was defined to build a new professional specification; and (3) develop a common training model, learning contents, and training materials, with specific attention to diversity sensory management. The training framework will present content and learning outcome guidance notes on a module-by-module basis to support the development of work of partners, ensuring that all the areas of required learning identified in the different countries will be appropriately considered and addressed. Using this learning outcomes approach allows for the tailoring of learning content to take account of the different cultural patterns in partner countries without compromising the value of the learning resource.

As such, the state-of-the-art will consist of multidisciplinary and evidence-based content that guides the project's framework, but also as a transferrable product to any work environment. It also sets a benchmark for organisations in Europe as it will collate a vast international desk of literature and field-based analysis, as well as showcases best practices that are currently differentiated across the European Union.

The research addresses the following key areas:

1. What are the key skill areas that need to be addressed in the training course for sensitive career/vocation managers?
2. What existing resources could be used or re-designed for use in the proposed training course to avoid duplication?
3. What are the most appropriate media formats for learning content for target groups?
4. What types of pedagogic, psychological, prevention supports, and positive interventions are needed to facilitate the involvement of participants/target groups into the programme framework?
5. What are the most appropriate teaching and learning methodologies?
6. What existing resources could be used or re-designed for use in supporting vocational advisors and/or employers to avoid duplication?
7. What existing resources could be used or re-designed for use in supporting highly sensitive people in their career development to avoid duplication?
8. What does an "optimal work environment" for highly sensitive people look like? What are the barriers and the enablers of workplace wellbeing and career development for highly sensitive people?
9. What are the sensitive advantage in employment?
10. What type of assessment framework would be most appropriate? And which are validated measures of wellbeing at work available in partner languages (i.e., Polish, Italian, Norwegian, Portuguese, Spanish, and Romanian)?

1.2.Steps for the desk research

The desk research will include an integrative review and a case studies desk research.

1.2.1 Integrative review

An integrative review has been decided upon, namely because of the criteria of inclusion, the methodology of inclusion, and critical analysis (Palmatier, Houston, & Hulland, 2018). The primary method of this study is an integrative literature review and conceptual analysis (Torraco, 2016).

Using guidelines on integrative literature reviews in human resource management (e.g., Torraco, 2005, 2016) as well as Nielsen's et al. (2017) systematic review of the literature, the following scope have been defined:

1. The literature review provides a value-added contribution and will provide the basis for additional outputs in the study, namely defining the competencies that work sensitive career managers, vocational advisors, coaches, and counsellors require.

2. The authors assumed that based on existing literature there is a link between management behaviour and sensitive employee well-being, and career development (Gregory et al., 2010; Smolewska et al., 2006, Cater, 2016).
3. The literature review is based on a conceptual structure cross-examining at the individual, group, leader, and organisational level in terms of career management, well-being management, and competencies for sensitive career managers, vocational advisors, and coaches
4. The scope of the literature review will be based on the last 10 years using a modified version of Nielsen's et al. criteria - top-tiered journals in human resource management (HRM) and psychology. The scope of the literature review will be based on indexed journals, relevant documents, and national governmental reports.
5. The research framework will focus on literature in Europe (member states in the European Union (EU), including the United Kingdom - UK) and the United States of America (USA), Canada, Australia, and New Zealand (the reason is that these studies are similar in culture to the EU) and include working-age adults in SMEs (small-medium enterprises) and secondary and tertiary students as participants. Mainly, articles will be used (as opposed to book chapters, proceeding papers, dissertations due to lack of determining rigour of published studies).
6. Quantitative, qualitative, and mixed-method studies will be included.
7. Articles that do not include highly sensitive person or 'work' well-being (i.e., examining wellbeing at home without reference to work) will be excluded
8. The search terms will be determined for each specific topic and will be noted in the specific sections (different spellings were used, i.e., UK, USA + interchangeable use of manager, leader was used as well).
9. Literature will be sorted and will be examined at the individual, group, or organisational resource-level.
10. Titles and abstracts will be first reviewed and based on the inclusion criteria will be either included or excluded.
11. Discussion among peer-reviewers to discuss any discrepancies and final inclusion of literature review.

The literature search will be systematic in its approach and comprehensive using more methods, in particular the use of multiple electronic databases and ancestry and hand search (the task of searching through peer-reviewed journals) methods. The purpose of comprehensive searches is to minimize biased conclusions in reviews (Whittemore 2007).

A broad search across database and platforms (Table 1) will be carried out. Additionally internet-based search engines designed to locate scholarly information such as Google Scholar, and Researchgate will be used.

Table 1 – Database and platforms

Database	Platform
Cumulative Index to Nursing and Allied Health Literature (CINAHL)	EBESCOhost
Cochrane Library	CRD, EBSCO, Ovid, Wiley
EMBASE	Elsevier, Ovid
Joanna Briggs Institute	Ovid
Medline	PubMed, ProQuest, EBSCOhost, Web of Science, and Ovid
Proquest Nursing and Allied Health Database	Proquest
PubMed and PubMed Central	National Center for Biotechnology Information
Scopus (includes EMBASE index terms and citations)	Elsevier
Web of Science	Clarivate Analytics
Proquest Research Library	Proquest

Proquest Social Science	Proquest
Educational Resources Information Center: ERIC	EBSCO, Ovid, Proquest
PsycInfo	APA PsycNet, EBSOCOhost, Ovid, Proquest
Sociological Abstracts	Proquest
SocIndex (EBSCO)	EBSCO
EBSCOhost Business Source Complete	EBSCO

The search terms (Table 1) are derived from the specific aims, similar published reviews, and through consultation with colleagues in the field, with combinations of truncated terms to be searched across all fields (title, abstract, keywords). No filters will be selected. Search terms will be combined using Boolean logic.

Reviewers are advised to begin with the familiar natural language, or keywords; find the most relevant search results, and within those, identify the controlled language, or subject terms, associated with those results. Controlled vocabulary may also be called controlled language subject headings or thesaurus terms. MeSH (Medical Subject Headings), developed by the National Library of Medicine and assigned to articles in Medline, PubMed, CINAHL, Cochrane, and other databases, is an example of a controlled language. Most but not all databases use controlled language systems or thesaurus. Controlled language searches may return fewer, but more relevant, results than natural language searches. Both natural language and controlled language searches are important to include in the search strategy because each method may yield different results. It should be noted that subject terms may not be consistent across databases. Reviewers will report possible reviews of search strategy (Annex 1).

Additional articles not listed in the database search will be identified through a review of reference sections from included articles and through correspondence with colleagues in the field and we will also include studies retrieved by handsearching in the aforementioned databases independently from the defined search strategy. Additional terms may be identified during the

For articles to be included, they should be (a) published in English, (b) empirical studies (regardless of their design), (c) published in peer-reviewed journals and (d) focused on performance in the workplace or naturalistic approximations of work tasks or secondary/tertiary education. Articles require highly sensitive persons, who were 18 years or older at the time of the study.

The integrative review will exclude conference papers, editorials, thesis books, and book chapters as a peer-review process could not be guaranteed but they can be considered for desk research on case studies (see paragraph 1.2.2).

Table 2 – Search terms by domains

Category	Search terms
Population	highly sensitive person, HSP, sensory processing sensitivity, environmental sensitivity
Focus	career management, human resource management, workplace, workplace well-being, employment advantage, enablers, barriers, support, service, programme, training, vocation, strategy, intervention, employer, supervisor, manager, environment, coach, mentor, self-help, facilitator, counselling, career development, career(s) counsel(l)ing career(s) guidance, careers(s) advice, guidance, guidance counsel(l)ing, information, Advice and Guidance (IAG), lifelong guidance, career management skills, career planning, career resilience, career self-efficacy/self-efficacy, decision(-)making, opportunity awareness, self-awareness, careers assessment, diagnostic assessment Secondary terms: career information skills, transferable skills, transition skills As to wellbeing at work measures: [(index or measure* or scale? or clinimetric? or metric? or questionnaire? or survey? or interview? or assessment? or inventor* or tool? Or indicator* or indices or subscale*) and well?being].ti.
Domain	Adult, employ*, vocation*, work*, job performance, labor market, labour market, wellbeing, assessment, professional development, career management, organisational change, life skills

Article selection will be independently performed by each partner team. At least two reviewers per partner country will select relevant references according to the search strategy and will report the results using the excel tool Study identification (annex 1). Studies will be initially selected following analysis of titles and abstracts as per the inclusion and exclusion criteria using the titles-first then abstracts screening strategy. After an initial search, titles will be searched, and obviously irrelevant articles will be removed. Next, abstracts of the remaining articles will be reviewed for potential inclusion in the full review. Inclusion at this stage only require a focus on research questions. The list of selected references will be sent to CMRC, task coordinator.

CMRC will exclude duplicates using EndNote® and manually when it will fail to detect them due to differences in spelling or use of abbreviations. As a result, a list of studies selected for integrative review will be created. The resulted citation list will be divided equally among the partners' reviewer pairs. The thus selected and assigned citations will be subjected to full-text analysis as per the exclusion criteria and information will be extracted and summarized for later analysis using the data extraction tool (Annex 2) making reference to the definitions and categorisation described below. At least two reviewers per partner country will analyse full text and extract the data.

Reporting will be performed according to Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) to improve its quality

Day & Nielsen's (2017) and Nielsen's et al. (2017) definitions to conceptualize the concepts of psychologically healthy workplaces and resources will be used. Psychological healthy workplace according to Day & Nielsen (2017) definition, which defines this as "ways in which organisations can foster individual well-being by focusing on the organisation, the workgroup, leaders and individual employees" (p. 296).

Workplace resources are classified according to Nielsen et al. (2017), and defined at the individual level as personal characters and behaviour (e.g., self-esteem, self-efficacy, competence), at the group level examines, for example, social support and interpersonal relationships between employees; at the leadership level as leadership characteristics, social interactions between leaders and employees, and at the organisation level on how work is organized, designed, and managed and may be seen as autonomy, skills variety, compensation schemes, social support, and performance appraisals (Nielsen et al., 2017, p. 103).

Following the above-noted definitions, the literature review will examine these areas from the perspective of how resources at the organisation, group, leader, and individual level are used to promote highly sensitive employees' career development and well-being.

Table 3 - Visual Representation of Categorisation

Individual level (personal characteristics & behaviour...)	Group level (social support, interpersonal relationships among employees, teamwork, characteristics, performance...)	Leader level (leadership characteristics and social interactions, leadership style...)	Organisational level (autonomy, skills variety, compensation, social support, performance appraisals....)
Sensitive career/vocation management			
Sensitive wellbeing management and stress prevention at work			
Competences/training for sensitive career/vocation managers, vocational advisors			

To determine management behaviour, sensitive career management, and employee well-being, all four levels need to be examined and not just at the leader-level. For example, individual characteristics (i.e., individual level), interpersonal relationships among employees (i.e., group level); leadership style (i.e., leader level); and autonomy (i.e., organisational level) influence management behaviour and employee wellbeing as well as provide a basis of competencies that a sensitive career manager requires.

As differential susceptibility means highly sensitive people thrive and prosper more than non-highly sensitive persons in good environments, it is critical to keep the focus on overall work wellbeing measurement in the study. Pushes to research and influence worker well-being without careful scientific measurement may be ineffective (Bartels et al. 2019). Even worse, if researchers conceptualise or measure worker well-being inadequately, a scientific study may impede rather than advance the science that surrounds it (Podsakoff et al. 2016).

Further, according to AON, a global leader in human resources consulting, millennials and beyond will dominate global workforce in 2025, making up to 75 percent of workforce composition (Putri, Dhewanto, Fadhil Nurdayat, 2020) and they are disrupting the established practices of their workplaces. Millennials are a generation born between 1981 and 1996, while Gen Z is the demographic cohort that succeeds Millennials; they are the first generations that have encountered technology as we know today while growing up. Above all, Gen Z and millennials want an employer who cares about their wellbeing (Putri, Dhewanto, Fadhil Nurdayat, 2020; Deloitte, 2021). Furthermore, younger employees are expecting more diversified and non-traditional well-being program offerings that are relevant to their needs while reflecting their unique generational perspectives.

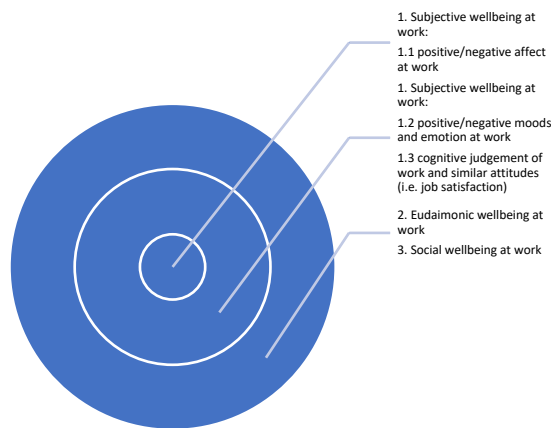
It is very clear that wellbeing at work is multidimensional (e.g., Grant, Christianson, & Price 2007; Page & Vella-Brodrick, 2009; Warr, 2013; Keeman et al., 2017). In the present study, wellbeing is conceptualized as the combination of feeling good (hedonism), well-being as subjective experience of happiness (Diener et al. 1999; Veenhoven 2000) and functioning well and realisation of human potential (eudemonia) (Aked et al., 2009; Ryff 1989; Ryff and Keyes 1995).

Additionally, evidence suggests that traditional stress interventions are often ineffective in the long term and do not result in improved organizational outcomes (LaMontagne et al., 2007; Baumeister and Alghamdi, 2015; Vanhove et al., 2016) while interventions focused on flourishing may provide a buffer against the negative effects of stress (Keyes and Grzywacz, 2005), indicating that investment in promotion of wellbeing may contribute to stress reduction while also producing additional benefits associated with flourishing at work (Hone et al., 2015). Stress and wellbeing constitute separate, but related, constructs and the absence of stress does not equate wellbeing.

According to the organisational literature, comprehensive conceptualisations and measures of wellbeing at work should include three major components: subjective wellbeing (job satisfaction and similar positive attitudes, positive and negative affect), eudaimonic wellbeing (e.g., engagement, meaning, growth, intrinsic motivation, calling), and social wellbeing (e.g., quality connections, satisfaction with co-workers, high-quality exchange relationships with leaders, social support, etc.) (Fisher, 2014). Spreitzer et al. (2005) explain that quality connections to others at work in a climate of trust and respect is integrally related to eudaimonic wellbeing as it enables growth and thriving.

Although the focus here is on indicators of high wellbeing, constructs involving very low wellbeing, such as burnout, could also be included on the list (Figure 1). Positive affect at work, the inner circle, is the experience of pleasant moods and emotions while working. It is one of three components of subjective wellbeing at work, the second circle, which also includes negative moods and emotions at work and cognitive judgments of work satisfaction and similar attitudes. The higher-level construct of overall wellbeing at work adds eudaimonic and social wellbeing components.

Figure 1 - Components of overall wellbeing at work



Following to this conceptualization and operative definition, one specific objective of the desk research will be also to identify validated measures in PRO-MOTION partner languages assessing these major components in the measures, their validity, and practicability.

1.2.2 Case studies desk research

In addition, case studies of good practice and innovative approaches of enterprises that exercise work well-being within their organisations will be collected from individual partner countries.

We are using the long-standing definition of good practice used in our review work. It is a process or way of working that makes a particularly positive contribution to work well being standards and the quality and/or enhancement of the learning opportunities and professional development all or some of which would be helpful for other institutions to hear about. The category of innovative approaches to work well-being recognises the potential contribution of new ways of career management and professional development provision. While such approaches may not yet be sufficiently embedded to demonstrate the level of impact of good practice, innovative approaches may offer solutions or improvements to new or existing needs that may be of wider interest to the sector.

Sources of case studies may be articles, reports, and posts as indicated in the collection tool (Annex 2). Definitions used in the integrative review will apply (see Table 3). Different report formats could be conference

proceedings, dissertations, white papers, companies standards or regulation or internal documents, and more. Some of these formats are grouped together with the term gray literature, a term used for any reports that are not published in peer-reviewed journals or controlled by commercial publishers. These reports could be produced by a wide range of organizations—business or industry, government entities, academic institutions, or nonprofits—where publishing is not the primary activity. As these organizations are not focused on publishing, reports can be difficult to locate and require different search approaches. Case studies will be identified through extensive internet research and identification of key actors in each domain to be contacted via e-mail. The search will be performed mostly in World Wide Web using search engines. A good way to locate case studies is also to do a keyword search in one or more of the library's databases. Some database may include selected book chapters, conference proceedings, and standards of practice. Another way of finding literature not yet discovered through aforementioned methods is to query subject experts and professional organizations. To start, a very short description of the desk research objectives and case studies to be included will be created and potential authors, professional organizations, or other places based on the search to date will be selected and a list of national organizations or companies will be created. Finally, request to individual key contacts will be send. This has not only the potential to yield case studies that have been missed, it can also provide a networking opportunity relevant for the next phases of the project.

The case study selection process will be developed iteratively and collaboratively with the Pro-motion project partners. Two meetings will be instigated during which the search, recording, and selection criteria will sequentially discussed and timelines for each phase of selection determined. This will ensure a transparent, timely and harmonised approach to selection of cases. During these meetings, core concepts will be defined and agreed upon.

A series of decision criteria to identify and carry out the selection of case studies apply. These criteria are separated into three categories:

- 1) Search criteria – this consists of the mandatory and optional criteria we identified to define boundaries around which cases we decided to record. These criteria are not restrictive, and the search will continue in a relatively open-ended manner to allow a broad range of engagement cases to be captured by the search.
- 2) Recording criteria – this encompasses the categories we are using to organise the information about the cases in the tables for each domain, as a pre-cursor to the selection process. This is refined with information from the literature review, as well as through the experiences of those searching for case studies.
- 3) Selection criteria – this effectively consist of the boundaries we put around our short-list of case studies to make the final selection.

The search for case studies will be not exhaustive but will include a range of potential cases even if they will be not likely to be selected as final cases. This strategy provides three advantages:

We will be able to generate a broader list of potential cases. This will provide important information about the context of sensitive career management; in some instances, this may include new knowledge about the relationships between career management focusing on the general population and those activities targeting highly sensitive persons. It also may provide insight about which phases of the research-innovation process are predominantly targeted as part of sensitive career management.

If selection criteria will change during the literature review or during our experiences of searching for case studies, we will not need to begin an entirely new search for potential cases.

Finally, some of the cases we may find and not select as one of our final case studies could be used to create vignettes for discussion in the focus groups or in other project activities.

For the purposes of Pro-motion, we defined a case study as needing to satisfy the following criteria: An initiative in the three domains of sensitive career/vocation management, sensitive well-being management and stress prevention at work, and competences/training for sensitive career managers, vocational advisors. This

initiative must have taken place between 2011 and the present. It can be entirely publicly funded or be a recipient of public-private funding. “Initiatives” are understood broadly.

1.2.3 Data management and extraction

A predefined data extraction form has been developed to extract data from all included articles and case studies (see Annex 2). The data extraction form has been developed according to Joanna Briggs Institute (JBI) and Cochrane manuals, as well as the literature associated with concepts and methods in human resources research. The data extraction form has been categorised into sub-sections, such as study details, objective of the paper, primary subject area of the paper (sampling, context, categories, etc.). The data extraction form also had a section on additional information on methodological consideration, recommendations, and other potential references.

Each project partner will extract data from articles, institutional documents, reports, and measures filling in the data extraction tool. CMRC will conduct the second review of the extracted data.

1.2.4 Data analysis, and reporting

Search results will be analysed using a combination of techniques. Descriptive analysis characterised included studies, mapping the data, revealing the distribution of studies across employment type, focus of career programmes or interventions and overall career outcomes (direct and indirect). Assessment of the methodological quality of included studies provided an understanding of the strength of the evidence in relation to the study design (Kmet et al., 2004).

The critical appraisal of the selected studies will be carried out by CMRC consulting partners for country focused data.

In the unlikely event that enough quantitative data is available, this will be pooled in statistical meta-analysis. If statistical pooling is not possible, the findings will be presented in narrative form. To analyse existing and emerging concepts, the procedures of constant comparison and filtering will be followed (Callahan, 2010). Content analysis will be used to analyse the content of the literature according to the pre-established categories and synthesise the extracted data. The content analysis process will involve several stages which involves noting patterns and themes, seeing plausibility, clustering, counting, making contrasts and comparisons, discerning common and unusual patterns, subsuming particulars into general, noting relations between variability, finding intervening factors and building a logical chain of evidence (Whittemore & Knafl, 2015).

Where possible, qualitative research findings will be pooled using a three-stage process. In stage 1, findings will be aggregated or synthesised to generate a set of statements that represent that aggregation level (Level 1 Findings). In stage 2, Level 1 Findings will be categorised on the basis of similarity in meaning (Level 2 Findings). In stage 3, Level 2 categories will be subject to a meta-aggregation which will produce a single comprehensive set of aggregated findings (Level 3 Findings) that can be used as a basis for evidence-based practice. Where pooling is not possible, findings will be presented in narrative form. Narrative Synthesis will be undertaken in accordance with the Guidance on the Conduct of Narrative Synthesis in Systematic Reviews (Popay et al, 2006).

The measurement scales will be classified as measures of subjective wellbeing at work (hedonic well-being, negative moods, and emotion at work; cognitive judgement of work and similar attitudes such as job satisfaction, etc.) eudaimonic well-being at work, social well-being at work, or multifaceted well-being at work.

All included scales will be then analysed for the comparators listed in excel tool. Common themes between scales will be coded by one researcher (CMRC), and the frequency of those themes will be recorded. A subgroup analysis will be also planned for studies that include scales or research related to highly sensitive persons’ wellbeing, if available. Descriptions of what scales are intended to measure, as stated by paper authors, will be taken into consideration but will be not strictly adhered to during analysis. This is due to a lack of agreement in the literature as to what certain terms mean, and a lack of a systematic way of defining those terms (Huta and Waterman, 2014). Instead, one researcher will judge whether scales should be included, and

what they measured, based on rigorous definitions agreed between all authors. This decision has been taken to improve consistency of definitions. Definitions of the terms are described in the paragraph 1.2.1

The researcher will assess measure's validity (theoretical and empirical validation) of each identified tool and practicality of each measurement strategy in the PRO-MOTION research context.

Most promising instruments in terms of validation and practicability will be classified by one/two researcher (CMRC) based on constructs' temporal stability (Johnson et al. 2018; Mäkikangas et al. 2016), the levels of scope of worker well-being constructs (context-free and domain-specific constructs) (Ilies et al. 2007), the valence of a construct can be considered (if constructs are indicators of ill-being or the absence of well-being - e.g., burnout, stress, workaholism, negative affect - or indicators of well-being - e.g., work engagement, flow, job satisfaction, positive affect (Wijnngaards et al 2021).

We agree with Bartels, Peterson, & Reina (2019) that the interpersonal dimension of social workplace wellbeing not only examines the feelings of belongingness and connectedness, but also captures specifically how these interactions create personal flourishing. The interpersonal dimension of workplace well-being captures the impact of social interactions within the workplace that contribute to an individual's ability to achieve personal flourishing (Bradbury, Lichtenstein, 2000; Diener et al, 2010).

The intrapersonal dimension of workplace wellbeing reflects internal feelings of value and meaningfulness within the workplace through the actual work itself or one's personal development as a worker (Bartels, Peterson, & Reina, 2019; Lewis et al, 2014; White, 2015)

Thus, these two constructs are an outcome of both social undermining and leader-member exchange relationships and should represent distinct constructs.

Table 4 – Table 1 Worker well-being constructs and their categorization - Adapted from Wijnngaards et al, 2021

Construct	Characterization	Philosophical tradition	Temporal stability	Scope	Valence
Life satisfaction	Cognitive evaluation of satisfaction with life situation.	Hedonic	Trait-like	Context-free	Positive
Dispositional affect	General tendency to experience emotional states.	Hedonic	Trait-like	Context-free	Positive and negative
Moods	Emotional states that remain stable for hours or days, occurring relatively frequently with nonspecific triggers	Hedonic	State-like	Context-free	Positive and negative
Emotions	Emotional states that remain stable for seconds or minutes, occurring infrequently with specific triggers.	Hedonic	State-like	Context-free	Positive and negative
Psychological well-being	Generally healthy psychological condition, involving self-perception, relationships, personal development, and autonomy.	Eudaimonic	Trait-like	Context-free	Positive
Job satisfaction	Cognitive evaluation of satisfaction with work situation.	Hedonic	Trait-like	Domain-specific	Positive
Dispositional job affect	General tendency to experience emotional states at work.	Hedonic	Trait-like	Domain-specific	Positive and negative
Job moods	Emotional states, experienced at work, that remain stable for hours or days, occurring	Hedonic	State-like	Domain-specific	Positive and negative

Construct	Characterization	Philosophical tradition	Temporal stability	Scope	Valence
	relatively frequently with nonspecific triggers.				
Job emotions	Emotional states, experienced at work, that remain stable for seconds or minutes, occurring infrequently with specific triggers.	Hedonic	State-like	Domain-specific	Positive and negative
Work engagement	A positive, work-related state of mind, characterized by vigor, dedication, and absorption.	Eudaimonic	Trait-like	Domain-specific	Positive
Interpersonal wellbeing	Perception of comfort at work, of the presence of relationships with others and of being able to form and reciprocate relationships at work (social wellbeing)	Eudaimonic	Trait-like	Domain-specific	Positive
Intrapersonal wellbeing	Perception of individual's energy, purpose, personal growth and ability to create value (social wellbeing)	Eudaimonic	Trait-like	Domain-specific	Positive

Based on the collected data and analysis, the literature review and case studies desk research report will be elaborated by CMRC.

1.2.5 Scheduling

Bilateral or multilateral meetings will be organised in early July to share the methodology. A doodle survey will be launched to easily schedule these meetings with partners.

Deadlines	Who	Integrative review	Integrative review (scales and questionnaire in national languages)	Case studies
11 th July	Maria Fabiani - CMRC	Maria Fabiani send the final version of the guidelines after consultation with partners		
5 th August	All partners	Partners will send to Maria Fabiani info@mariafabiani.eu the list of identified references using the Annex 1 - collection tool. A copy of the filled in collection tool will also be uploaded by each partner on Freedcamp. At this stage studies will be selected following analysis of titles and abstracts as per the inclusion and exclusion criteria using the titles-first then abstracts screening strategy.		

Deadlines	Who	Integrative review	Integrative review (scales and questionnaire in national languages)	Case studies
13 th August	CMRC - UTV	CMRC will eliminate duplicates and the resulted citation list will be divided equally among the partners' reviewer pairs.		
13 th August	CMRC – UTV WSEI		Send to partners an example of scale/questionnaire's data extraction using the Annex 2	Send to partners an example of case study's data extraction using the Annex 2
September, 2 or 3	All partners	Working meeting, if needed		
10 th September	All partners	Partners will analyse the full-text of the assigned list of citations as per the exclusion criteria and information will extract and summarise for later analysis using the data extraction tool (Annex 2) . At least two reviewers per partner country will analyse full text and extract the data. The Annex 2 will be sent to Maria Fabiani info@mariafabiani.eu	Partners will include information on validated scales in national languages using the data extraction tool (Annex 2)	Partners will include information on case studies using the data extraction tool (Annex 2)
30 th September	CMRC - UTV	First draft of the desk research report will be delivered and shared with partners		