Employer Strategies for Preventing Mental Health Related Work Disability: A Scoping Review[1]

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ABSTRACT

This study examined Nordic research on psychosocial work environment and disability management, specifically employer strategies for preventing work disability in common mental disorders (CMDs). A scoping review was performed to identify strategies across several research databases, alongside contact with content experts, hand-searching of non-indexed journals, and internet searches. Identification and selection of relevant studies, charting of data, and collating and summarizing of results was done using a six-step framework for conducting scoping reviews. Several key elements and knowledge gaps were identified in current prevention approaches and workplace initiatives across the included studies. We propose a program theory for workplace prevention of CMD-related work disability. The program theory may help specify employer strategies, and bridge activities with stakeholders outside the workplace.

KEYWORDS

Scoping review / mental health / work disability / employer / workplace / return to work

Background and relevance of the problem

Nordic working life research has a long tradition for critical studies on work disability prevention that provides a consistent knowledge base on the central role of employers in developing and maintaining a healthy workforce (Hvid 2011; Kamp

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& Nielsen 2013). Importantly, employers have responsibility to structure preventive initiatives, and their efforts to organize and manage human resources in working environments influence employee sickness absence understood as temporary or periodic inability to work (Geisen & Harder 2011; Loisel & Anema 2013). One of the major challenges for employers striving to prevent work disability is the magnitude of common mental disorders (CMDs) such as anxiety, depression, and stress-related illness (Andersen 2012; Corbiere 2009; McDowell & Fossey 2015). From a cross-national perspective, musculoskeletal disorders no longer comprise the largest diagnostic group. Instead, CMDs are increasing among the working-age population, with depression and stress-related illness rising as the dominant public health problem among the Nordic countries (Prins 2013). The economic and social costs associated with high levels of CMD make a clear 'business case' for work disability prevention as a renewable area for employers to boost preventive legitimacy and approaches. Many employers do strive to establish a comprehensive preventive approach, while struggling to understand the complex ways in which CMDs are embedded within productivity, work organization, and social relations at work (MacEachen 2006). Facilitating new employer opportunities to prevent CMD-related work disability has therefore been subject to much scientific and political debate, including a wide spectrum of research fields (Gallie 2011; Pomaki 2012; WHO 2006).

Employer activation in work disability policy

Several Nordic research studies have debated the employer role in work disability policies, and to what extent employers should be responsible to accommodate workers. Dealing with employer responsibility in organizing return to work (RTW), however, is a complex issue for several reasons. Employers do not receive a great deal of training in managing the process of RTW (Ekberg 2016; Stochkendahl 2015). Employers need capacity building in workplace strategies and how to coordinate separate activities to make them work together (Kärrholm 2007; Tjulin 2010). Contemporary sickness benefit policies and legal requirements do not always adequately prompt employers to engage in RTW, and often little guidance is given on specific requirements for work accommodation and follow-up outside the workplace (Clayton 2011; Seing 2015a). In contrast, recent administrative reforms seem to have been introducing continuous change in work activation and sickness benefit schemes with added responsibility for RTW coordination put on local welfare services (Aust 2015; Seing 2012). This makes it difficult to integrate inclusive working life with work activation policies (Andreassen & Spjelkavik 2013). While recent reforms are debateable and manifested differently across the Nordic countries, the reforms have proven less likely to facilitate and maintain a strong workplace approach, and rather created a 'missing link' to employers in post injury/illness prevention (Clayton 2011; Ståhl 2009). Importantly, Nordic welfare states risk to miss critical employer resources that could serve a more systematic approach to bridge preventive activities and renew the role of employer as a stakeholder in social policy (Midtsundstad 2008). Interestingly, differences in work disability outcomes seem to be highly correlated with differences in applied workplace interventions across countries. The main implication of such research findings is that a policy change is needed to encourage more attention to employer efforts and workplace initiatives, through collaborative action at the workplace level (Anema 2009).

The value of integrated prevention approaches

Many practical and economic reasons exist to why the workplace may be the ideal setting for establishing and implementing initiatives to prevent CMD-related work disability. Mykletun and Harvey (2012) argue how 'the prospect of using the workplace to help prevent mental illness brings together the two opposing paradigms in occupational mental health'. They explain how the focus of any workplace initiative to prevent CMD should be on revealing the harmful components of the work environment with the intention of removing the exposure or buffering its effect when viewed from the 'toxic work-stress' paradigm. Adopting the 'work-is-good-for-your-health' paradigm, workplace initiatives, such as modified work and partial sickness absence, should be considered as preventive initiatives in disability management in their own right (Mykletun & Harvey 2012). Traditionally, scientists have been separating workplace interventions to prevent CMD-related work disability in primary, secondary, and tertiary prevention approaches (Murphy & Sauter 2004). While there is a rationale for discussing and distinguishing prevention activities across prevention approaches, there are considerable limitations in implementing primary and secondary prevention activities as separated processes (Kristensen 2008). In the context of CMD-related work disability, preventive efforts may be initiated from a psychosocial work environment approach to prevent sickness absence, and/or a disability management approach to coordinate resources and promote RTW. Here, employers face challenges supporting the RTW process, while at the same time assessing and learning from issues in the working environment that could potentially 'trigger' the CMD condition, when implementing workplace initiatives and work practice change (Hasle 2009; Tjulin 2015). While considering the challenges of work-related stress, an integrated prevention approach remains an important subject for ongoing scientific refinement, particularly as a conceptual means to bridge preventive paradigms and to avoid thinking in silos (Harenstam 2005).

Synthesizing research to inform and guide policy and practice

The state of the evidence is in a constant change, and today's preventive methods do not necessarily contribute to the best preventive solutions of tomorrow's problems. One of the main drivers for innovative solutions is scientific research and knowledge exchange processes with key stakeholders, which can offer practitioners and policy makers a new line of reference to substantiate preventive initiatives and funding for relevant development projects. The preventive legitimacy of companies is highly influenced by how well employers apply knowledge to guide practice, and how well employees assess, and experience preventive initiatives as implemented in practice (Van Eerd & Saunders 2017). To keep preventive legitimacy, companies are challenged to work systematically with scientific knowledge production on what works and under which conditions. In recent years, various research approaches have been applied to pave the way for new preventive insight about workplace interventions and CMD. In this line of work, synthesis research is a central resource (Hannes & Lockwood 2012). As new research is getting published, synthesis research can help identify systematic flaws between evidence-based knowledge and needs in practice. Here, synthesis research methods are an effective means to keep up with findings that may be relevant to consider and ought to give legitimacy to influence

company structures and preventive actions. Yet, Nordic research knowledge about work disability management strategies in CMD is still evolving (Andersen 2012; Borg 2010; Vingaard 2015). This study builds on existing synthesis research and looks exclusively at employer strategies to prevent CMD-related work disability. The primary objective is to scope the field of recent research on workplace initiatives and organizational practices to prevent CMD-related work disability, focusing on prevention approaches and interventions strategies applied. Secondary objectives are to discuss CMD-related employer strategies from an integrated prevention approach, which encourage knowledge mobilization and collaborative action with stakeholders outside the workplace.

Methods for achieving review results

We chose a scoping review method to explore the research field and identify key issues of psychosocial work environment research on workplace initiatives to prevent sickness absence, and work disability management research on organizational policies and practices to promote RTW and outline alternative areas of inquiry. Scoping reviews or scoping studies refer to a process of 'mapping' or 'scoping' the existing literature of a given research area (Arksey & O'Malley 2005). Scoping reviews are one of several methods used to review primary research (Hannes & Lockwood 2012), and have been applied widely within work and health research to identify knowledge gaps, summarize findings, and outline new types of research inquiry (Karpur 2014; McDowell & Fossey 2015; Saunders & Nedelec 2014). Scoping reviews differ from systematic reviews in that they do not involve a quality assessment of included studies or a checklist for procedures. Scoping reviews are also different from traditional narrative (literature) reviews in that the scoping process requires analytical reinterpretation of the literature (Levac 2010). Arksey and O'Malley (2005) define a scoping review as a process of rapidly mapping the key areas and concepts underpinning a research area to examine the extent, range, and nature of a research activity to identify research gaps and follow-up action. In keeping with Levac and colleagues (2010), scoping reviews are particularly relevant to research areas of emerging evidence, such as workplace initiatives to prevent CMD-related work disability. In this context, a scoping process appears useful because its inductive and inclusive nature allows researchers to incorporate a range of study designs in both published and grey literature, which may support researchers to refine subsequent research inquiries (Levac 2010).

Methodological approach to scoping the field

Our scoping review methodology builds on a six-step framework for conducting scoping reviews originally developed by Arksey and O'Malley (2005). This study describes the stages of the scoping process with recent enhancement for each step based on the framework by Levac and colleagues (2010):

1. Identifying the research question
2. Identifying relevant studies
3. Selection of studies

4. Charting and categorizing of data
5. Narrative reporting and summary of results
6. Consultation with practice

Identifying the research question

The study was commissioned by The Swedish Social Insurance Agency through a developmental initiative between public authorities, scientists, and social partners in working life, focusing on identifying knowledge and development needs related to work and health, sickness absence, and RTW. The research topic for this scoping review stems from a series of dialogue conferences with the stakeholders in this initiative, where the aim was to support employers' strategies for preventing sickness absence, and to promote RTW. We used an iterative process to adapt a set of research specific questions to guide the scoping review process. The following questions have guided the process of scoping the field of recent research on psychosocial work environment and disability management to identify studies on workplace initiatives and practices to prevent CMD-related work disability:

• What is the extent of knowledge, and key issues in (1) psychosocial work environment research on workplace initiatives to prevent sickness absence due to CMD, and (2) research on organizational practices to promote RTW following CMD?
• What kind of employer opportunities and alternative areas of inquiry emerges from a synthesis that cut across preventive approaches, and reinterprets knowledge from within the two research traditions to inform an integrated CMD prevention approach?
• What types of stakeholders are relevant for bridging preventive initiatives to settings outside the workplace?

Identifying relevant studies

The following key concepts and terms were used to target the search and select relevant studies for inclusion in the review. Specifically, these concepts include a definition stating what the scoping review means by 'work disability' (Loisel & Anema 2013), 'psychosocial work environment' (Limborg 2002), 'workplace disability management' (Gensby 2014), 'workplace initiative' (Pomaki 2012), 'sickness absence' (Labriola 2006), and 'return to work' (Krause & Lund 2004). We decided to do one literature search instead of two separate searches targeting each research discipline, casting a broad net to ensure a comprehensive coverage of the literature in the hopes that we catch a larger percentage of relevant studies. The sources for identifying relevant peer reviewed studies are the electronic databases Medline, EMBASE, PsycInfo, CINAHL, Business Source Premier, Health and Safety Science Abstracts, and Sociological Abstracts. We did consider the Cochrane database as a relevant source of information. We acknowledge that the lack of inclusion of Cochrane database in the literature search could be a potential limitation. However, a recent systematic review conducted by the lead author (Gensby 2012) found no Cochrane reviews published within the CMD group that met the definition

and eligibility criteria for inclusion in this review. Google Scholar advanced search options was used to search the web to identify unpublished studies. We searched for peer-reviewed papers published in English and/or Scandinavian languages (Danish, Swedish, and Norwegian) between 2000 and 2016. The search concepts and associated key terms are illustrated in a Venn diagram in Appendix 1. Research prior to 2000 was considered informative from a historical perspective but less relevant to inform present preventive initiatives and practices in the workplace. In addition, we used a 'snow balling' approach to scan reference lists of retrieved studies and reviews, which could lead to additional studies, and did a separate search process in three Scandinavian-language peer review journals. The targeted Scandinavian-language journals were Journal of Working Life (*Tidsskift for Arbejdsliv*) (DEN), Journal of Labor Market and Working Life (*Tidsskiftet Arbejdsmarknad och Arbetsliv*) (SWE), and Spotlight on Working Life (*Soekelys paa Arbeidslivet*) (NOR). Hand-searching was completed within the *Nordic Journal of Working Life Studies*. Finally, we contacted a selected group of content experts to suggest relevant studies. The identified articles were combined, using EndNote where titles and abstracts were reviewed to illuminate redundancies.

Selection of studies

The overall guiding principle for the selection of studies was based on the value of the research findings to map key issues and address knowledge gaps to refine subsequent research inquiries, and not a quality assessment and appraisal checklist for procedure. Using a pre-defined set of inclusion criteria, all studies was independently screened for relevance by at least two review authors based on titles and abstracts. In cases of discrepancy, the authors made contact to discuss issues related to the article until consensus was achieved. If a consensus could not be reached, a third author was consulted. Eligible studies were then read in full text to decide which studies should be included for charting and categorizing of data. The inclusion criteria guiding study eligibility and selection are presented in Appendix 2.

Charting and categorizing data

The same researchers who worked on the selection of studies (UG, HL, CS, KA) were involved in the data extraction of each study and charting and categorizing of data. In line with Malachowski and Kirsch (2013), we adopted a directed narrative content analysis to capture and compile relevant information and key issues for our data chart into coding categories (Malachowski & Kirsh 2013). In keeping with Saunders and Nedelec (2014), we used an Excel spreadsheet to chart the general information and terminology used from each article into our coding categories (Saunders & Nedelec 2014). In total, 10 coding categories emerged in an iterative process, including author name, publishing year, study setting/jurisdictional context, study objective, study design and method, study population, applied prevention approach, type of workplace initiative and organizational practice, intermediate change and/or outcome, and study findings. Since this is a scoping review, no quality assessment was executed of individual studies. Instead, the focus of the data charting process was to map the diversity of study characteristics,

workplace initiatives, and organizational practices studied to create new insight about the nature of research and provide directions and recommendations for future employer opportunities and studies.

Consultation with practice

This scoping review was guided by a transdisciplinary (TD) research ideal, which has been promoted over the last decade as a necessary perspective to fully grasp the complexity of CMD-related work disability prevention (Loisel & Durand 2005). TD may be defined as 'a way to open research beyond any single discipline to seek a more holistic understanding of a problem' (Choi & Pak 2006). An expectation of TD research in this study is that it contributes to joint problem-solving between researchers from different disciplines to understand preventive approaches and initiatives between *the health care provider*, *the person*, *the insurance provider*, and *the employer/workplace* (Nowotny 2006). The TD approach adopted for this scoping study included a team of scientists with different disciplinary backgrounds, public-sector decision makers (The Swedish Social Insurance Agency), and businesses (public and private workplace stakeholders). The Triple Helix model (Svensson 2009) was used as a framework to facilitate a joint process to identify relevant research questions and engage stakeholders during the scoping process.

Results of the scoping review process

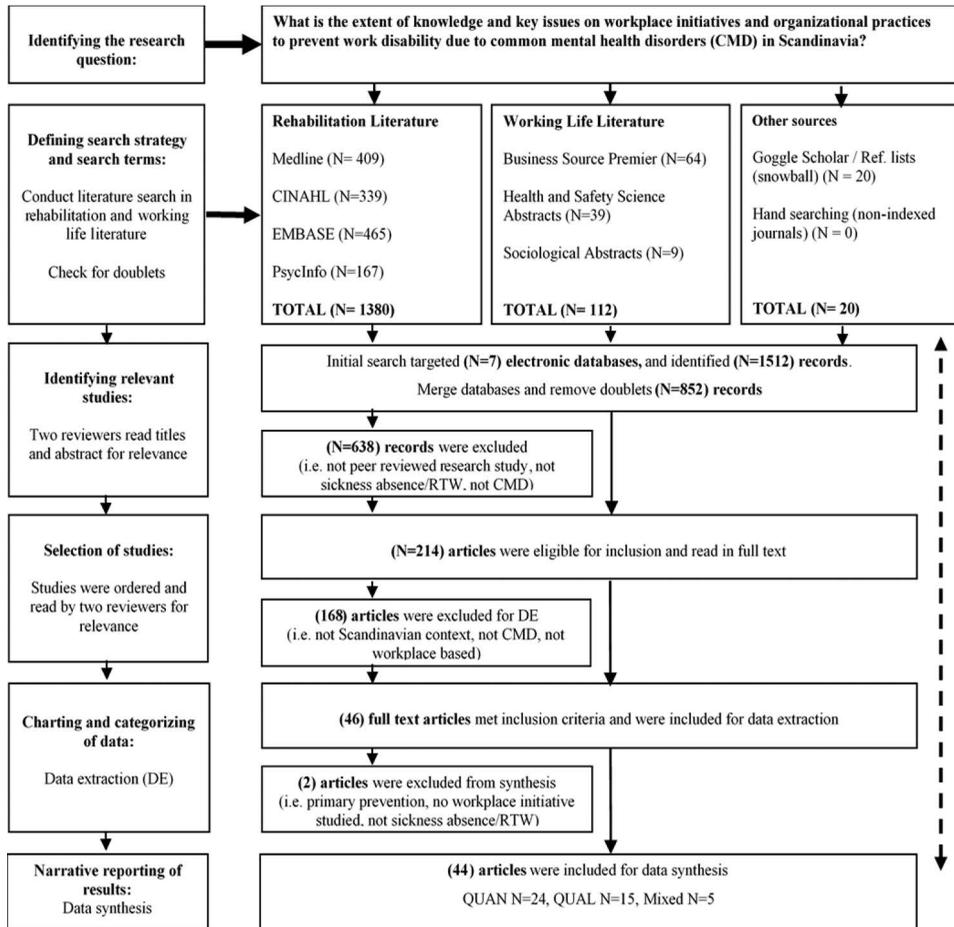### Literature searches and selection of relevant studies

The initial search targeted disability management and psychosocial work environment research in seven electronic databases and identified 1512 potentially relevant records. Our Google scholar search and screening of reference lists resulted in 20 records. Hand searching of the selected nonindexed journals did not yield additional records. After merging databases and removing duplicates, 852 records remained. Following screening of titles and abstracts, 638 records were not peer reviewed research studies, did not focus on sickness absence and/or RTW, and/or did not target CMD-related work disability. In total, 214 studies were included for full text relevance screening. From these, 46 full text articles met our relevance criteria for charting and categorizing of data. Studies excluded from the relevance screening did not focus on workplace initiatives and/or organizational practices to prevent CMD-related work disability in a Scandinavian context. An additional three studies were excluded during data extraction and charting of study data. Finally, a total of 44 studies were included for reporting and data synthesis, including 24 quantitative studies, 15 qualitative studies, and five mixed methods studies. Figure 1 shows the flow chart and steps taken in our search process.

Narrative reporting and interdisciplinary data synthesis

We present our narrative reporting and data synthesis from scoping the field of workplace initiatives and organizational practices to prevent CMD-related work disability in

Figure 1 Flow chart and steps taken in completing our scoping review.

Identifying the research question:	What is the extent of knowledge and key issues on workplace initiatives and organizational practices to prevent work disability due to common mental health disorders (CMD) in Scandinavia?

Defining search strategy and search terms: Conduct literature search in rehabilitation and working life literature Check for doublets	**Rehabilitation Literature** Medline (N= 409) CINAHL (N=339) EMBASE (N=465) PsycInfo (N=167) **TOTAL (N= 1380)**	**Working Life Literature** Business Source Premier (N=64) Health and Safety Science Abstracts (N=39) Sociological Abstracts (N=9) **TOTAL (N= 112)**	**Other sources** Goggle Scholar / Ref. lists (snowball) (N = 20) Hand searching (non-indexed journals) (N = 0) **TOTAL (N= 20)**

Identifying relevant studies:

Two reviewers read titles and abstract for relevance

Initial search targeted (N=7) **electronic databases,** and identified **(N=1512) records**. Merge databases and remove doublets **(N=852) records**

(N=638) records were excluded (i.e. not peer reviewed research study, not sickness absence/RTW. not CMD)

Selection of studies:

Studies were ordered and read by two reviewers for relevance

(N=214) articles were eligible for inclusion and read in full text

(168) articles were excluded for DE (i.e. not Scandinavian context, not CMD, not workplace based)

Charting and categorizing of data:

Data extraction (DE)

(46) full text articles met inclusion criteria and were included for data extraction

(2) articles were excluded from synthesis (i.e. primary prevention, no workplace initiative studied. not sickness absence/RTW)

Narrative reporting of results:
Data synthesis

(44) articles were included for data synthesis
QUAN N=24, QUAL N=15, Mixed N=5

two sections. This first section describes the basic study characteristics and information of the included studies as presented in Table 1. The second section analyzes the underlying program theory, prevention approach and intervention strategies used, and provide a detailed summary of key issues related to the workplace initiatives and/or organizational practices studied.

Jurisdictional context and setting

Most of the included studies on workplace initiatives and organizational practices to prevent CMD-related work disability were conducted in Sweden (n = 24, 54%), published between 2003 and 2016. Several authors reported information on the jurisdictional context to understand the role of employers in the Swedish national sickness

benefit system. A smaller number of studies were conducted in Denmark (n = 14, 32%), published between 2006 and 2016. Many authors described the jurisdictional context to understand the role of employers in the Danish national sickness benefit system. Fewest studies were conducted in Norway (n = 6, 14%), published between 2001 and 2016. Some authors reported information on the jurisdictional context to understand the role of employers in the Norwegian national sickness benefit system.

Study design and methods used

The typical *quantitative* data collection methods were survey questionnaires combined with register-based panel data from administrative records or company records. The 24 quantitative studies included the following study designs and methods:

- Five studies used a *randomized controlled trial* (*RCT*) design with follow-up periods between three, six, 12 and/or 18 months (Eriksen 2002; Netterstrøm 2013; Peterson 2008a; Reme 2015; Tveito & Eriksen 2009).
- A variety of *quasi-experimental* designs were used in 12 studies, including prospective studies evaluating a nonrandomized two-group intervention (Karlson 2010; Martin 2013; Netterstrøm & Bech 2010; Nielsen 2002). Other studies used a matched-control (Eklund 2013), partial matched control group (Landstad 2001), or matched comparison (Grossi & Santell 2009; Wästberg 2016; Wåhlin 2012). The quasi-experimental studies included follow-up periods between six months and two years. However, one study used a prospective full-panel cohort, including three cross-sectional samples with a five-year follow up (Borritz 2006).
- The remaining studies adopted *case-control* designs (Høgelund 2012; Lander 2009), simple before and after design (Anderzen & Arnetz 2005), prospective cohort designs (Heijbel 2005), or a cross-sectional survey design (Selander 2015).

The typical *qualitative* data collection methods were semi-structured individual interviews. Some studies use a combination of methods, including individual interviews, focus group interviews, and/or participant observation or participatory workshops. The 15 qualitative studies included the following study designs and methods:

- Most of the studies used a *multiple case study* design (Braathen 2015; Gahnström-Strandqvist 2003; Gunnarson 2014; Holmgren & Dahlin 2004; Ipsen & Jensen 2012; Tjulin, 2010, 2011a, 2011b). Two multiple case studies were conducted with matched pairs (Seing, 2015a, 2015b).
- Other studies adopted a *narrative case study* design (Ståhl 2014), and an action research case study design (Gensby & Husted 2013).
- Two studies were conducted using *ethnographic fieldwork* (Larsen 2015; Petersen 2016).

Finally, the five *mixed method* studies included the following study designs and methods:

- One study was a four-wave questionnaire study with a qualitative case study component (Hjarsbech 2015).

- Other studies were prospective cohort studies with a qualitative case study component (Andersen & Westgaard 2013; Nielsen 2012) or a quasi-experimental longitudinal study with added process evaluation (Nielsen 2007).
- One study combined a cross-sectional study with a qualitative multiple case study component (Vinberg & Landstad 2014).

Setting and participant characteristics

The included workplace initiatives to prevent CMD-related work disability were defined in relation to different target groups: employers, workers, coworkers, and service providers. Studies focused on various combinations of these groups. The included workplace initiatives were provided in a variety of workplace settings, including the human service sector, the health care sector, the industrial and manufacturing sector, and private consultancies.

The included workplace initiatives and RTW change processes targeted the magnitude of CMD's with work-related stress as the most common mental health problem across the included studies:

- Work-related stress (n = 19),
- Depression (n = 13),
- Unspecified mental health diagnoses and problems (n = 12),
- Burnout/exhaustion (n = 9),
- Anxiety (n = 7),
- Emotional distress (n = 3).

Some studies did not only exclusively focus on CMD but also included other diagnoses. Further, some studies focused on exploring existing practices, rather than testing interventions.

Outcome measures and change processes studied

Five groups of outcome measures were identified across the included *quantitative studies*:

1. The first group of outcomes include *individual measures of sickness absence*, such as the duration of sickness absence (Andersen & Westgaard 2013; Anderzen & Arnetz 2005; Borritz 2006; Eklund 2013; Eriksen 2002; Landstad 2001; Nielsen 2002; Tveito & Eriksen 2009), number of sick days (Landstad 2001), nature of absence (short or long term) (Landstad 2001), and part-time sick leave (Høgelund 2012).
2. The second group of outcomes include *subjective health measures,* such as subjective health complaints (Eriksen 2002; Tveito & Eriksen 2009), self-rated symptom levels and health (Anderzen & Arnetz 2005; Grossi & Santell 2009; Netterstrøm 2013; Nielsen 2002; Wästberg 2016), perceived job stress (Eriksen 2002; Nielsen 2002, 2007; Wästberg 2016), personal coping (Tveito & Eriksen 2009), perceived change in mental health and well-being (Peterson 2008a; Reme 2015), self-assessed

functioning and work ability (Ahlstrom 2013; Wåhlin 2012), and perceived changes in health-related quality of life (Reme 2015; Wästberg 2016).

3. The third group of outcomes include various *RTW measures,* such as individual expectations to RTW (Selander 2015), self-efficacy (Wåhlin 2012), initial RTW (Ahlstrom 2013; Karlson 2010; Netterstrøm & Bech 2010; Selander 2015), rate of RTW (Grossi & Santell 2009; Netterstrøm 2013), duration until RTW (Høgelund 2012, 2014; Lander 2009; Martin 2013), work participation (Reme 2015), return to pre-illness employer or new employer (Høgelund 2014), and sustained RTW (Karlson 2014).

4. The fourth group of outcomes include various *measures related to the work environment,* such as perceived worker role (Eklund 2013), workplace characteristics (Borritz 2006), self-assessed work environment (Andersen & Westgaard 2013; Eklund 2013), perceived quantitative work demands (Peterson 2008a), and/or psychosocial work demands (Tveito & Eriksen 2009, Vinberg & Landstad 2014), job satisfaction (Borritz 2006; Nielsen 2002, 2007), perceived change in work conditions (Andersen & Westgaard 2013; Nielsen 2007; Peterson 2008a; Wästberg 2016), social support (Heijbel 2005), quality of contact (Selander 2015), and type of intervention received (Heijbel 2005).

5. Finally, the fifth group of outcomes include various measures of *labour market status,* such as employment status (Lander 2009; Martin 2013), employment duration (Høgelund 2014), relapse to absence (Karlson 2014), employee turnover (Borritz 2006), early retirement (Borritz 2006), and costs (Reme 2015).

Four dimensions related to the change processes studied were identified across the included *qualitative studies*;

1. The first dimension relates to the nature of *coordination external to the employer* during the RTW process, such as administrative processes and early contact during RTW (Seing 2015b; Tjulin 2011a), management assessment and ability for stakeholder corporation (Gunnarson 2014), and dilemmas of social responsibility in RTW activities (Seing 2015a).

2. The second dimension includes *work-related obstacles for RTW*, such as environmental and psychosocial barriers for RTW (Holmgren & Dahlin 2004; Nielsen 2012; Ståhl 2014), work intensification and obstacles at work (Gunnarson 2014; Hjarsbech 2015; Larsen 2015; Seing 2015b).

3. The third dimension encompasses *workplace social support*, such as the nature of work accommodation and social relations when back at work (Braathen 2015; Larsen 2015; Tjulin 2010), co-worker roles, and capability to support RTW arrangements and initiatives (Petersen, 2016).

4. The fourth dimension includes *personal experience of capacity to work*, such as experienced change in work ability (Braathen 2015), process of occupational adjustment, and management of recovery at work (Gahnström-Strandqvist 2003; Hjarsbech 2015; Ståhl 2014).

5. Finally, the fifth dimension relates to *organizational learning,* such as disability management policy development (Gensby & Husted 2013; Tjulin 2010), capacity building for joint learning and action (Gensby & Husted 2013; Tjulin 2015), and organizational options and (re)-design factors (Ipsen & Jensen 2012).

Table 1 Basic characteristics and information of included studies

Included quantitative stuides

Author/Yr.	Context	Research objective(s)	Research design	Type of inquiry/Method(s) used	Health issue	Sample features	Outcome/Change
Ahlstrom (2013)	SE	To investigate the impact of rehabilitation measures on work ability and RTW	Quantitative, Prospective cohort study	Exploratory approach with deductive inquiry. Data were collected using COPSOQ questionnaire at baseline, 6 and 12 months follow-up	Unspecified mental health diagnoses	324 female workers on full or part time sick leave from human service sector	RTW, Increased work ability
Anderzen (2013)	SE	To study whether knowledge about psychosocial work indicators and a structured method to implement changes based on such knowledge comprise an effective management tool for enhancing health and well-being	Quantitative, Simple before and after study	Explanatory approach with deductive inquiry. Data was collected using questionnaires at baseline and follow-up (1 year). Production data and sickness absence data at the work-unit level were retrieved from centralized data	Work-related stress	303 employees from 22 work units, representing five offices of a large public employer	Quality of work, Sickness absence, Self-rated health
Borritz (2006)	DK	To present the theoretical framework, design, methods, and baseline findings of the first Danish study on determinants and consequences of burnout, and the impact of workplace interventions in human service work	Quantitative, Quasi-experimental study with a prospective full-panel cohort and three cross-sectional samples	Descriptive approach with deductive inquiry. Data was collected using COP-SOQ questionnaire at baseline, and self-reported survey questionnaires with a 5-year follow-up. The survey results are used to initiate ad-hoc workplace interventions	Burnout	1914 employees from various occupations in the human service sector	Workplace characteristics, Job satisfaction, job turnover, sickness absence, early retirement

		Aim	Design	Focus	Sample	Outcomes
Eklund (2013)	SE	To explore changes in the work situation from baseline to a 12-month follow-up in the Redesigning Daily Occupations group compared with the 'care as usual' group and analyze any predictors of change	Quantitative, Quasi-experimental, matched-control study	Descriptive and exploratory approach with deductive evaluation. Data was collected at baseline and 12 months follow up, using questionnaires and register data	Work-related stress and depression	70 employed women (37 intervention and 33 control) sick leave >2 months	Sick leave, Perceived worker role, Self-assessed work environment
Eriksen (2002)	NO	To evaluate the effect of 12 weeks of stress management training, physical exercise and an integrated health program in a worksite setting on subjective health complaints	Quantitative, Randomized controlled trial (RCT)	Exploratory approach with deductive evaluation. Data were collected using questionnaires before and after intervention and at 1 year follow up	Work-related stress	860 employees from 29 post service offices	Health complaints, Sickness absence, Job stress
Grossi (2009)	SE	To evaluate the effects of a stress management intervention among 24 female patients on sick leave due to work-related psychological complaints	Quantitative, Quasi-experimental study	Explanatory approach with deductive inquiry and evaluation. Data was collected before and after treatment, and at 6- and 12-month follow-up, utilizing questionnaires and blood sampling	Work-related stress, burnout and depression	24 municipal employed women (12 intervention and 12 control) full-time and part-time sick-listed	Self-rated symptoms, Duration of illness, Rate of RTW
Heijbel (2015)	SE	To describe the situation of long-term sick-listed persons in the public sector regarding the medical reasons of their sick leave, the duration of their problems, the duration of sick leave, rehabilitation support, and rehabilitation measures	Quantitative, Longitudinal prospective study	Exploratory and descriptive approach with deductive inquiry, using questionnaires and telephone interview	Burnout and distress	776 persons from various occupations in the health care and human service sector	Rehabilitation, Type of support, Factors influencing RTW

(Continued)

Table 1 (*Continued*)

Included quantitative stuides

Author/Yr.	Context	Research objective(s)	Research design	Type of inquiry/Method(s) used	Health issue	Sample features	Outcome/Change
Høgelund (2012)	DK	To estimate the effect of part time sick leave on the duration until returning to regular working hours for employees with mental disorders	Quantitative, Case-control study	Explanatory approach with deductive inquiry. Data were collected using a survey with register follow-up to compare effect of part time sick leave with 'other disorders'	Work-related stress and depression	226 employees on long-term CMD sick leave and 638 workers with other disorders	Part-time sick leave, Duration until RTW
Høgelund (2014)	DK	To study whether workers remaining with their employer in job accommodation after a sick leave have longer employment durations than workers who either change or remain with their employer in a non-accommodated job	Quantitative, Prospective cohort study	Explanatory approach with deductive inquiry. Data was collected using a telephone interview survey and register data	Unspecified mental health problems	809 persons sick-listed for >8 weeks	Duration until RTW, Employment duration RTW, or new employer
Karlson (2010), (2014)	SE	To evaluate the effect of a workplace-oriented intervention for persons on long-term sick leave for clinical burnout, aimed at facilitating RTW by job-person match through patient-supervisor communication	Quantitative, Prospective study of a two-group intervention with matched control	Descriptive and exploratory approach with deductive evaluation. Data was collected after the intervention, and at 1.5 years follow up, using questionnaire and register data	Burnout exhaustion disorder	74 workers in intervention and 74 in control group, sick-listed for 2–6 months	Sustained RTW, Relapse to absence

Author (year)	Country	Aim	Design	Approach	Construct	Sample	Outcomes
Lander (2009)	SE	To evaluate the effect of an intervention program compared to usual welfare benefit care on RTW or labour market	Quantitative, Case-control study	Explanatory approach with deductive inquiry. Data was collected using survey questionnaires to compare effect of intervention with individuals receiving treatment as usual	Emotional distress	72 patients in intervention group and 89 sick-listed in control group	Time to RTW, Labour market status
Landstad (2001)	NO	To investigate whether a preventive intervention carried out in a female workplace had any effect on patterns of absenteeism, and study the interactions between different forms of absenteeism	Quantitative, Quasi experimental study with non-randomized partial matched control group	Explanatory approach with deductive inquiry. Data was collected before and after intervention (8 months) using data from national insurance register and company records	Work-related stress	Sick listed workers in hospitals cleaning services. 89 in intervention and 30 control group	Sickness absence, Type of absence (short or long), Number of sick days
Martin (2013)	DK	To assess the effectiveness of multidisciplinary, coordinated, and tailored approach as implemented among sickness absence beneficiaries with mental health problems	Quantitative, Quasi-randomised, controlled study	Explanatory approach with deductive evaluation of a two-group intervention with baseline screening and follow up for 52 weeks, using questionnaires and register data	Work-related stress, anxiety, burnout and depression	Employees sick-listed for 4–12 weeks with 106 participants in intervention group and 90 in the control	Time to RTW, Labor market status
Netterstrøm (2010)	DK	To test the effect of a multi-disciplinary stress treatment programme on the RTW rate in persons with work-related stress and establish predictive factors for this outcome	Quantitative, Nonrandomized prospective controlled study	Descriptive approach with deductive inquiry and evaluation. The intervention was compared to 'treatment as usual'. Data was collected at baseline, after four months, after one and two years using questionnaires.	Work-related stress	63 persons in the intervention group and 34 persons in the control group	Level of sick leave, RTW

(Continued)

Table 1 (*Continued*)

Included quantitative stuides							
Author/Yr.	**Context**	**Research objective(s)**	**Research design**	**Type of inquiry/ Method(s) used**	**Health issue**	**Sample features**	**Outcome/ Change**
Netterstrøm (2013)	DK	To evaluate the effects of a multidisciplinary stress treatment program for employees on sick leave with work-related stress	Quantitative, Randomized controlled trial (RCT)	Explanatory approach with deductive inquiry. The intervention was compared with no treatment (a waitlist control group) and treatment as usual (psychologist). Data was collected, using questionnaires at baseline, 3 months follow up and end of treatment,	Work-related stress	198 employed patients on sick leave	Symptom levels, RTW rate
Nielsen (2002)	DK	To present the background, design, and some baseline results from IPAW	Quantitative, Nonrandomized controlled study	Descriptive approach with exploratory inquiry. Data were collected from two kind of control worksites (high absence intervention worksites, and low and high absence control worksites, respectively), using survey questionnaires	Work-related stress	2068 workers from 22 interventions and 30 control work-sites	Self-rated health, Perceived stress, Sickness absence, Job satisfaction, Job turnover
Peterson (2008)	SE	To test the effect of participating in a reflecting peer-support group on self-reported health, burnout, and on perceived changes in work conditions	Quantitative, Randomized controlled (RCT)	Explanatory approach with deductive inquiry and evaluation. Data was collected at baseline and seven and 12 months follow up, using survey questionnaires and qualitative documentation of group session	Burnout, anxiety and depression	51 participants in the intervention group, and 80 in the control group from the health care sector	Change in work conditions, Quantitative demands, Changes in mental health/ well-being

Author	Country	Aim	Study design	Approach and data	Diagnosis	Sample	Outcomes
Reme (2016)	NO	To evaluate the effectiveness of an integrated model (work-focused CBT and individual job support) for people struggling with work participation due to common mental disorders, and examine subgroups and costs	Quantitative, Randomized controlled trial (RCT)	Explanatory approach with deductive inquiry and evaluation. The intervention was compared with 'standard' treatment. Data was collected at baseline, 6 and 12 months follow up, using self-report questionnaires, and register data (up until 18 months)	Anxiety and depression	193 workers who were at risk of sick leave, on sick leave or on long-term benefits	Work participation, Changes in mental health and health-related quality of life, costs
Selander (2015)	SE	To investigate the pattern and quality of contact between the employee on long-term sick leave and the supervisor; HRM, OHS, Union, and coworkers; and explore whether contact was associated with RTW expectations of absent employees	Quantitative, Cross-sectional study	Exploratory and descriptive approach with deductive inquiry. Data was collected using survey questionnaires	Unspecified mental health problems	390 permanent employed persons on sick leave between 60–90 days	Quality of contact, RTW expectations
Tveito (2008)	NO	To assess if an integrated health program would reduce sick leave and SHCs, and to increase coping in a population of nursing personnel	Quantitative, Randomized controlled trial (RCT) (pilot)	Descriptive approach with deductive inquiry and evaluation. The intervention program was compared to treatment as usual. Data collection was collected before (baseline) and after the intervention period	Work-related stress	19 workers in intervention group and 21 in control, working more than 49% of full time in nursing homes	Sick leave, Subjective health complaints, Coping, Psychosocial work demands

(Continued)

Table I *(Continued)*

Included quantitative studies							
Author/Yr.	**Context**	**Research objective(s)**	**Research design**	**Type of inquiry/Method(s) used**	**Health issue**	**Sample features**	**Outcome/Change**
Wästberg (2016)	SE	To investigate if women's perceptions of their work environment changed during a 16-week rehabilitation period and at a 12-month follow up, and whether changes were related to RTW, well-being and valued occupations	Quantitative, Quasi experimental longitudinal study with matched comparison	Exploratory approach with deductive evaluation inquiry. Data was collected before (baseline) and after the intervention, and at 6 and 12 months follow up, using survey questionnaires	Work-related stress	84 individuals. 42 participants on sick leave in the intervention group, and 42 in the comparison group	Perceived work changes, RTW, Quality of life, Self-rated health, Job stress
Wåhlin (2012)	SE	To explore what characterizes patients receiving clinical interventions vs combined clinical and work-related interventions in a cohort of sick-listed with MSD or CMD	Quantitative, Prospective cohort study of a two-group intervention	Descriptive and exploratory approach with deductive inquiry/evaluation. Data were collected at baseline and at 3 months follow up, using questionnaires, including patients' self-reported measures	Unspecified mental health diagnoses	699 sick-listed patients (267 patients who sought PHC or OHS for CMD - 38%).	Expectations and self-efficacy, Social support, Functioning and work ability
Wåhlin (2013)	SE	To describe the types of intervention offered, to investigate the relationship between the type of intervention given, patient-reported usefulness of interventions and the effect on self-reported work ability	Quantitative, Prospective cohort study of a two-group intervention	Deductive evaluation with descriptive and exploratory reasoning/ Data collection was done at baseline and patients were followed up after 3 months using a postal questionnaire, including patients' self-reported measures	Burnout, anxiety and depression	963 subjects on sick leave from various occupations	Work ability, Type of intervention received, and usefulness

Included qualitative studies

Author/Yr.	Context	Research objective(s)	Research design	Type of inquiry/ Method(s) used	Health issue	Sample features	Outcome/ Change
Braathen (2015)	NO	To explore self-perceived change in work ability among persons attending occupational rehabilitation programs	Qualitative, Multiple case study	Exploratory approach with inductive inquiry. Data was collected using semi-structured individual interviews 6 months after program participation	Anxiety and depression	17 participants in various jobs, working full time, reduced hours, sick leave from human service sector/ industry	RTW, Self-perceived change in work ability, Improved coping
Gahnström-Strandqvist (2003)	SE	To understand the meanings of the lived experiences of persons with long-term mental illness at a social working cooperative	Qualitative, Multiple case study	Exploratory approach with inductive inquiry from the participants' perspectives, using semi-structured individual interviews at two or three time points during the study period	Anxiety and depression	18 participants on sickness benefits and supported employment	Change in work experience and occupational life-world
Gensby (2013)	DK	To expand the concept of participation in disability management and create new insights on the resources, dilemmas and aspirations of RTW policies in organisations	Qualitative, Action research case study	Developmental approach with abductive inquiry. Data was collected using chronicle workshops and future creation workshops to facilitate interactive knowledge creation between researchers and workplace stakeholders	Work-related stress	27 participants from various departments and job functions	Organizational learning, RTW policy change
Gunnarson (2014)	SE	To understand and identify possible areas of improvement in the RTW process in small companies	Qualitative, Multiple case study	Exploratory approach with and inductive inquiry, using semi-structured open ended individual interviews	Unspecified mental health problems	16 employers (managers and HR) from different trades and various jobs	Occupational adjustments, Return to other work tasks, Corporation

(*Continued*)

Table 1 (*Continued*)

Included qualitative studies							
Author/Yr.	**Context**	**Research objective(s)**	**Research design**	**Type of inquiry / Method(s) used**	**Health issue**	**Sample features**	**Outcome/ Change**
Holmgren (2004)	SE	To learn how women on sickness absence due to work related strain perceive and describe their possibilities and obstacles for returning to work	Qualitative, Multiple case study	Exploratory approach with inductive inquiry from the sick-listed perspectives. Data were collected using semi-structured open ended individual interviews	Burnout, Distress	20 employed women on sickness leave for a mean of 93 days	Experienced environmental and personal obstacles for RTW
Ipsen (2012)	DK	To explore the organizational options for preventing work-related stress problems in knowledge work	Qualitative, Multiple case study	Exploratory approach with and inductive inquiry. Data were collected using semi-structured open-ended individual interviews	Work-related stress	27 private consultants working full time	Organizational factors Reduced sickness absence and turnover
Ladekjær Larsen (2015)	DK	To explore coworkers' experiences of the reintegration process and how these experiences are related to social positions at the workplace	Qualitative, Ethnographic field study	Explanatory approach with inductive inquiry. Data were collected using in-depth field observations and semi-structured individual interviews	Work-related stress and depression	19 workers/co-workers in nursing homes some in modified and/or part time sick leave	Post RTW, Inclusive social relations at work
Petersen (2016)	DK	To identify domains of influence on co-worker's ability to be supportive of returning worker during the work reintegration process	Qualitative, Ethnographic field study	Exploratory approach with inductive inquiry. Data were collected done within 2 weeks of work re-entry and at end of fieldwork, using semi-structured individual interviews, focus group interviews, and participant observation	Depression	30 coworkers working in nursing homes	Develop capability of coworkers to support RTW

Seing (2015b)	SE	To analyze RTW practice in local workplace contexts, in relation to Swedish early RTW policy	Qualitative, Multiple case study with matched pairs	Exploratory approach with inductive inquiry and theoretically informed analysis. Data was collected using semi-structured individual interviews.	Unspecified mental health diagnosis	36 sick-listed workers and their supervisors from 18 workplaces	Nature of work, Process of return-to-work, The role of the welfare system
Seing (2015a)	SE	To analyze the role and activities of employers regarding RTW in local workplace practice	Qualitative, Multiple case study with matched pairs	Exploratory approach with inductive inquiry and theoretically informed analysis. Data was collected using semi-structured individual interviews	Unspecified mental health diagnosis	36 sick-listed workers and their supervisors from 18 workplaces	Social responsibility and RTW activities
Ståhl (2014)	SE	To analyze how different types of sick leave narratives were related to RTW, job mobility or continued sick leave for sick-listed people with CMD	Qualitative, Narrative case study	Exploratory approach with inductive inquiry. Data were collected on two occasions, with 3 to 4 years' interval, using narrative interview technique	Unspecified mental health diagnoses	8 persons on sick leave between 1 and 18 months	RTW; job mobility, continued sick-leave
Tjulin (2010)	SE	To explore how workplace actors, experience the social relations at the workplace and how organizational dynamics in workplace-based RTW extends before and beyond the initial return of the sick listed to the workplace	Qualitative, Multiple case study	Exploratory approach with inductive inquiry. Data was collected using semi-structured and open-ended individual interviews	Unspecified mental health diagnoses	33 participants (re-entering worker, 2–3 coworkers, RTW coordinator; supervisor; and/or the HRM in seven work units)	Content of RTW, Experience of RTW process and social relations at work

(Continued)

Table 1 *(Continued)*

Included qualitative studies							
Author/Yr.	Context	Research objective(s)	Research design	Type of inquiry / Method(s) used	Health issue	Sample features	Outcome/ Change
Tjulin (2011)	SE	To explore the role and contribution of coworkers in the RTW process	Qualitative, Multiple case study	Exploratory approach with inductive inquiry. Data were collected using semi-structured and open-ended individual interviews. Document review of workplace RTW policies	Unspecified mental health diagnoses	33 participants (re-entering worker, 2–3 co-workers, RTW coordinator, supervisor and/or the HRM in seven work units	Experiences of co-worker roles and support in RTW
Tjulin (2011)	SE	To explore the meaning of early contact in RTW, and how social relational actions and conditions can facilitate or impede early contact among actors in the workplace	Qualitative, Multiple case study	Exploratory approach with inductive inquiry. Data were collected using semi-structured and open-ended individual interviews	Unspecified mental health diagnoses	33 participants (re-entering worker, 2–3 coworkers, RTW coordinator, supervisor, and/or the HRM in seven work units	Experiences of workplace contact during RTW
Tjulin (2015)	SE	To investigate how individual learning emerges among workplace actors during the RTW process, and whether the prerequisites for collective learning are present and managed by actors	Qualitative, Multiple case study	Exploratory approach with inductive inquiry. Data were collected using semi-structured and open-ended individual interviews.	Unspecified mental health diagnoses	11 sick-listed persons, five supervisors, three coworkers, private and public sector	RTW, Individual and organizational learning

Included mixed methods studies

| Author/Yr.	Context	Research objective(s)	Research design	Type of inquiry/Method(s) used	Health issue	Sample features	Outcome/Change
Andersen (2013)	NO	To identify critical factors in the interaction between work environment interventions and independent rationalization measures to understand a potential negative interfering effect on a work environment intervention	Mixed methods study with a historic prospective cohort and qualitative component	Exploratory approach with abductive quantitative estimations, using register data of sick leave, a time line of significant events and changes, and qualitative descriptions of employee appraisals of their work situation gathered through semi-structured interviews and open survey responses	Work-related stress	138 respondents from 11 home care units. 17 workers were selected as interview informants	Change in work situation, Consequences of work situation, Sick leave
Hjarsbech (2015)	DK	To explore how a selected sample of Danish employees with depressive symptoms experience the interaction with their work environment and how they respond to and deal with problems at work	Mixed method design with a four-wave questionnaire study and a qualitative case study component	Exploratory approach with inductive inquiry from the employees' perspectives. Participants from a larger survey study reporting CMD at baseline, were invited for semi-structured interviews	Depression	13 participants, working in various types of occupations	Experienced obstacles at work, Change in work situation
Nielsen (2007)	DK	To explore the impact of employees' direct appraisals of the intervention itself on intervention outcomes	Mixed method design with a quasi experimental longitudinal study and added process measures	Exploratory approach with deductive evaluation. Data were collected from 11 intervention projects with baseline and follow up measures before and after (2 years) by means of survey questionnaires and qualitative process evaluation.	Work-related stress	538 workers from female-dominated workplace human service work	Changes in working conditions, Behavioural stress, Job satisfaction

(Continued)

Table 1 (*Continued*)

Included mixed methods studies							
Author/Yr.	**Context**	**Research objective(s)**	**Research design**	**Type of inquiry/ Method(s) used**	**Health issue**	**Sample features**	**Outcome/ Change**
Nielsen (2012)	DK	To explore how women with mental health problems experience sickness absence and subsequent RTW	Mixed method design with a prospective cohort study and a qualitative case study component	Exploratory approach with inductive inquiry. Data was collected using semi-structured interviews	Anxiety and depression	16 women on sick leave between 2 and 15 months from various occupations	Environmental and psychosocial obstacles and facilitators for RTW
Vinberg (2014)	SE	To contribute to knowledge about workplace-based prevention and rehabilitation programs	Mixed method design combining a cross sectional survey study with a qualitative multiple case study	Exploratory approach with inductive inquiry. Data were collected using semi-structured interviews and questionnaires at two points in time with a 2-year interval (before and after workplace based prevention and rehabilitation were carried out)	Work-related stress	311 individuals, including 19 middle managers and 292 coworkers	Sickness absence, Employee turnover, Perception of psychosocial work environment

Program theories, prevention approach, and intervention strategies

In this section, we have analyzed the included studies from their own understanding of the prevention approach and the underlying presumptions of how an RTW process can result in successful and sustainable personal and environmental outcomes. This includes an assessment of whether the workplace initiative is considered part of a secondary or tertiary prevention approach, or an integrated approach, and how the aim of prevention is defined. The core of our analysis is the design and execution of the different types of workplace initiatives and the organizational practices that are studied. This includes an overview of the work-related components that constitutes the initiative studied, as well as any key parties and/or stakeholders that have been involved in the execution of the initiative during the RTW process. These questions lead us to look for an overall program theory (Pawson & Tilley 1997) underlying the descriptions of workplace initiatives/interventions in the included studies. Based on the included studies (as represented by the mutual research focus on CMD-related work disability), we have uncovered an overall program theory that is the background for almost all the intervention research studies, however specified differently within each study. Some of the qualitative studies do not specify any program theory due to the exploratory nature of the study design. Figure 2 illustrates the overall program theory and the constituent elements identified across the included studies.

Importantly, none of the included studies have presented a comprehensive approach that covers all elements of the program theory; individual studies considered one or more elements in the model. In the following, we will explore the elements of the program theory and give examples of how the elements in the program theory have been applied and prioritized in the included studies.

Figure 2 Program theory for workplace prevention of CMD-related work disability.
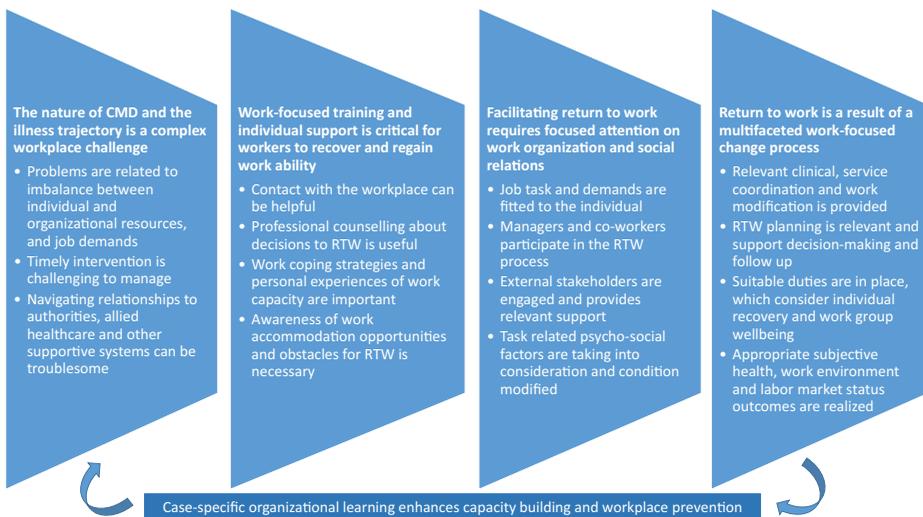
The nature of CMD and illness trajectory is a complex workplace challenge

The first part of the program theory considers the complex nature of CMD-related sickness absence from the onset of work disability, which can be summarized in the following issues:

- Problems are related to imbalance between individual and organizational resources, and job demands.
- Timely intervention is challenging to manage.
- Navigating relations to authorities and external support can be troublesome.

The scoping of the literature did not yield studies that focus on the relationship between the process before a CMD occur, and the onset of work disability. Included studies seemed to take the prehistory of the CMD as a prerequisite. When prehistory considerations are made, the most common anticipation is that CMD-related work disability stems from an imbalance of individual capacity and resources, and organizational resources and job demands. A substantial epidemiological literature exists on the aspects of the work environment that are risk factors for developing CMD and may predict sickness absence and RTW (Alexanderson 1998; Ekberg 1995; Lund & Labriola 2009; Vingaard 2015). Understanding these risk factors and the ability to identify and alter them is equally important to consider in workplace prevention programs and rehabilitation (Ekberg 1995).

Many employers consider the nature of CMDs and the illness trajectories a complex managerial challenge where longer periods of time can pass before someone intervenes. This perceived complexity of timely RTW intervention can be conditioned by several issues. One issue is related to the supervisor's behavior toward the sick-listed worker. Here, supervisors can be either too absent or too present, which may result in the worker feeling left alone with the negative experiences of work that led to emotional, cognitive, and somatic symptoms, or in the latter case, that the worker feels controlled and pressured to pursue work resumption (Hjarsbech 2015; Seing 2015a). Another issue concerns the often sensitive information about the worker's health situation, which can make it difficult for supervisors and coworkers to get relevant knowledge to understand work capacity limitations and plan job tasks (Gensby & Husted 2013; Larsen 2015). Some studies find that timely RTW is a complex measure due to the shifting incentives among workplace actors for initiating interventions and that these incentives often are a mix of obligation and legal responsibility, following the implementation of stricter activation principles in social security insurance (Seing 2015b), social relations in the work group and the supervisor, and/or awareness about individual worker needs (Tjulin 2011a). Here, many employers expect the workers themselves or other parties to be more active in deciding the appropriate time for intervention. Yet again, employers and workers stress the many changes in the work organization as a challenge, since supervisors may be given responsibility for old sick leave cases, in which the worker/health issue in question is not known to the supervisor (Seing 2015b). Importantly, the timeliness of intervention ought to be considered with respect to the recovery of the ill worker, which involves a refocus from negative symptoms to readiness for RTW, while maintaining a positive self-image (Nielsen 2012).

Navigating the relationship to external authorities can be troublesome for employ-ers. Employers explain that they often lack knowledge and are uncertain about their overall role in the RTW process (Gunnarson 2014). Typically, the various stakehold-ers work alongside each other in subsequent processes, and not as integrated entities with systematic coordination directed toward the employer (Braathen 2015; Martin 2013). This can blur the responsibility for RTW between the various stakeholders and create dilemmas for employers in taking social responsibility for RTW in local work-place practice, which does not adequately prompt employers to engage in RTW (Seing 2015a). Often employers do have knowledge on how to notify and report to the social security agency on the onset of work disability. However, employers propose easier access to facilitate early dialogue around the worker situation and ways to get info about relevant resources and steps in the RTW process. Another critical navigation issue for employers is that the social insurance case manager has knowledge about the workplace and work-related issues that are relevant to consider in the context of RTW. Detailed and better coordinated knowledge that are tailored to the workplace could prompt adequate and timely employer action. Importantly, OHS services could take a more active knowledge broker role in the RTW process, as they are supposed to have the practical workplace insight and understanding of the work context, which can support employers and workers in navigating relations and adequate RTW planning (Gunnarson 2014).

Work-focused training and individual support is critical to recover and regain work ability

The second part of the program theory represents the workers' situation during the sick leave period, in which the worker considers his/her health situation and recovery, work ability, and possibility to RTW. This part of the program theory comprises studies that focus on various elements related to

- Professional counselling on decisions about RTW is helpful
- Work coping strategies, and experiences of work capacity are important
- Contact with the workplace can be helpful
- Identification of accommodation opportunities and obstacles for RTW are useful

Various professionals can act as helpful experts to support workers with CMD-related work disability about possibilities and decisions to RTW. Particularly, trained psycholo-gists can support the workers' efforts to adopt a problem-solving approach to their problems, provide work-focused cognitive behavioral therapy (CBT), and ensure con-tinuous dialogue with workers' on decisions about RTW and participation in meetings with the workplace (Lander 2009; Reme 2015). In addition to the trained psychologists, social insurance case managers provide advice and support to workers concerning legal matters and the opportunities of various work arrangements (Lander 2009), such as individual placement support (IPS) to facilitate workplace adaptations or identification of appropriate employment (Reme 2015).

Several studies focused on some form of stress management training (Eriksen 2002; Grossi & Santell 2009; Tveito & Eriksen 2009; Wästberg 2016). The training

sessions included different components. In one study, the sessions included therapy-based group treatment programs teaching how to identify, understand, and handle psychological and somatic symptoms of stress (Grossi & Santell 2009). Others included training related to coping with job demands or dealing with the workers own mental health problems, and stress factors or a combination of both (Tveito & Eriksen 2009). Others focused om awareness training through group-based discussions about everyday work situations and constraints related to perceived psychosocial work demands (Wästberg 2016), or CBT applied in a way that focus on managing CMDs as they relate to work situations (work coping) (Reme 2015). Use of problem-focused strategies was helpful for workers in aiming to redefine and tackle stress-full situations (Eriksen 2002). In some cases, training sessions also involved informal teambuilding and social activities, which should enable coworkers to see each other as a source of social support (Nielsen 2007). Importantly, results show that an integrated model of work-focused CBT and IPS is more effective than usual care in increasing or maintaining work participation for workers' with CMD-related work disability (Reme 2015). Others illustrate how receiving a combined clinical and work-directed RTW intervention resulted in positive outcomes on job satisfaction and well-being (Tveito & Eriksen 2009), and increased the probability for RTW among patients with CMD, but not among patients with MSD (Wåhlin, 2012, 2013). Furthermore, one study suggests that integrated health programs consisting both physical exercise, information about stress, coping strategies, and practical examination at the worksite have greater effects on the subjective feeling of being in good health than stress management training or physical exercise individually (Eriksen 2002). Although the primary characteristics of stress management interventions were psychoeducative treatment, individual problem-solving methods, and coping strategies in relation to the work situation, interventions varied in their ability to capture the complex ways in which decisions about RTW is influenced by workplace culture or the underlying conditions at work that caused the problem.

Most interventions include some form of contact to the workplace while on sick leave. Contact between the sick-listed and the workplace appears as a well-known recommendation; however, several studies emphasize that the timing and frequency of contact may be less important than the quality (Selander 2015). According to these studies, it is not enough that the contact is established early and frequently. The nature of contact seems equally important to consider, as are the different individual needs for early contact and to be aware of the shifting incentives among workplace actors for making contact (Tjulin 2011a). An additional finding was that supportive organizations such as HRM, OHS, and the unions were considerably less in contact with the worker during the RTW process than supervisors and coworkers (Selander 2015). The studies indicate that unions and OHS services can have a more visible role in the RTW process, and specifically during RTW planning and work practice implementation and change (Gunnarson 2014).

Other interventions include a stronger focus on awareness about obstacles for RTW and the nature of work tasks before sick leave to inform individual RTW planning (Holmgren 2004; Tveito 2009). Typically, dialogue about obstacles for RTW consider possible changes or modifications in the work tasks, or workplace assessment focused on the active input from participants about how to best organize and cope with the work situation (Tveito & Eriksen 2009). Few studies considered the role of participation a

mediator for intervention outcomes. One study found that workers appraisal of intervention activities mediated the relationship between participation and reported changes in work conditions, job satisfaction, and behavioural stress. Thus, it seems important to provide timely information and ensure participatory opportunities that leads workers to believe they can influence the content and quality of the RTW activities in a sustainable manner. These results highlight the need to consider participatory and cognitive processes that influence outcomes of RTW interventions (Nielsen 2007).

Facilitating RTW requires focused attention on work modification and social relations

The third part of the program theory considers the process of facilitating RTW through focused attention on the psychosocial work environment. This part of the program theory illuminates the complex way in which individual capacity to RTW is influenced by the condition of the work environment such as

- Managers and coworkers participate in RTW process
- Work tasks and demands are fitted to the individual
- Task-related psychosocial factors are taken into consideration and condition modified
- External stakeholders provide and coordinate relevant support

The dialogue between supervisors and re-entering workers is thought to be an essential element to sustain RTW and it is therefore suggested that the supervisor could play a more significant role in some of the relatively unseen or grey areas of RTW: the pre-return and the post-return phase at work and role in the workplace prevention (Hjarsbech 2015; Holmgren & Dahlin 2004; Tjulin 2010). The latter requires that the supervisors manage to be more responsive to employee's experiences of problems and conflicts at work to avoid prolonged sick leave (Hjarsbech 2015). Thus, the relationship with supervisors and the type of social support from supervisors is an important psychosocial work environment issue to consider prospectively (Nielsen 2012). Furthermore, there is a need to involve coworkers in the RTW process and to pay attention to social communication and the negotiation of work roles of the returning worker as well as coworkers (Tjulin 2011b). Hence, acceptance and understanding from coworkers can help social inclusion of re-entering workers in the work group once back at work (Larsen 2015). The work environment and the attitudes toward sick leave constitute an overall frame for how social interaction between coworkers and the returning worker takes place (Larsen 2015; Petersen 2016). Workplace interventions are vulnerable to changes in the work environment, such as negative work exposure from general system rationalization (Anderzen & Arnetz 2005). The harmful and interruptive effects of, for example, rationalization measures can be prevented by promoting active communication channels among supervisors and workers (Andersen & Westgaard 2013).

Studies indicate that part-time sick leave by itself is insufficient for promoting the RTW of employees with CMD (Høgelund 2012). Instead, considering alternative placements or work settings can be an important alternative to employment for participants with complex CMD, who do not yet have the capacity to be employed full time in the work community and reflect the need for alternative forms of employment for those who

wish to return to a job on 'ordinary' conditions. Embedded in this acknowledgment is the understanding that psychosocial rehabilitation can take a very long time to enable persons with complex CMD to develop their personal well-being and individual capacities required to meet new challenges in their everyday working life (Gahnström-Strandqvist 2003). In general, supportive conditions in the psychosocial work environment (such as influence at work, possibilities for development, degree of freedom at work, meaning of work, quality of leadership, social support, sense of community, and work satisfaction) should be integrated in workplace rehabilitation to increase work ability and improve RTW (Ahlstrom 2013). When considering task-related psychosocial factors as part of an RTW intervention employers should aim at some form of condition modification that promote well established psychosocial work environment dimensions such as; high control, high support, high meaning, high predictability, and suitable demands based on a mixture of theory driven and practice-based research between experts' concepts and a participatory input. Facilitating participatory input can be done by using group meetings to address the work tasks and demands in the work group, which has shown to promote individual preparation of RTW with support from the work group. This approach did promote RTW without a change in the workers perceptions of their role in the work group; rather, they renegotiated their view of the work environment to adjust work processes (Eklund 2013).

Different forms of CMD-related work disability ought to be looked at in parallel, with no intervention or external support initiative fit to cover all forms. Here, external service providers are often lacking enough knowledge of the specific background for sickness absence due to work-related CMD (Landstad 2001). Peer support groups using a problem-based approach can be a useful tool to include in service provider programs for alleviating CMD's such as work-related stress and burnout (Peterson 2008b). Consultation between the employer and the worker with joint responsibility for assessing the requirements for rehabilitation, and for initiating measures for an effective rehabilitation plan, addressed to the service provider, seems to promote adequate workplace-directed coordination between those involved in occupational rehabilitation programs (Heijbel 2005). Others have found that an unclear level of employer involvement in a coordinated and tailored occupational rehabilitation program can contribute to a delay in RTW when compared with conventional case management. Thus, understanding the underlying assumptions about how the planned program activities are expected to influence the desired outcomes is useful to assess whether delayed RTW may be a result of either implementation or program failure, or both (Martin 2013). Different data are useful to help strengthen the timeliness of employer involvement during the RTW process. One study combined data of CMD-related work disability and absence duration using models for 'human resource accounting'. By using the model, key sickness absence indicators can be measured on a yearly basis at an individual and aggregated workplace level. In addition, worker input helped inform education and training of line managers during implementation of the model in the workplace (Vinberg & Landstad 2014).

Return to work is the result of a multifaceted workplace-focused change process

Overall, it seems that the quality of the psychosocial work environment is closely linked to the possibilities for RTW. Importantly, RTW implies change processes in the work

organization and social relations, which require attention to individual worker and coworker support needs in all phases of the RTW process. Hence, employer strategies ought to be responsive to changes in the work group or work organization, and that these changes are coordinated in relation to the needs of the re-entering worker and coworkers throughout the RTW process to ensure that the returning worker is not socially excluded as well as ensuring that coworkers are not overburdened in the process. Finally, it seems important to ensure collective space for joint learning and explication of workers' and supervisors' tacit knowledge about obstacles and opportunities at work as means to enhance the dialogue and address the stress management practice (Gensby & Husted 2013; Tjulin 2015). Often collective and supporting structures that could prevent CMD-related problems are distant to practical problem-solving, and workers are left with individualized responsibility for own job performance and work situation. A profound development area is to ensure the alignment of a human factor perspective as a central component in the organizational design process in which solutions are managed (Ipsen & Jensen 2012). Utilizing ongoing case-specific organizational learning seems relevant to enhance RTW capacity building during such development processes (Tjulin 2015).

Discussion and wider implications

This study represents an attempt to scope the field of Nordic working life research on employer strategies to prevent CMD-related work disability to summarize the existing evidence-base and key research elements in this research area. The results show a wide array of research approaches, considering focus, scope, and methodology. The studies explore practices and test interventions on individual, workplace, and interorganizational levels. However, we found no studies that take a broader perspective that covers all steps in the suggested program theory of the research field (Figure 2). As a result, the studies generally fail to consider several levels of analysis, or to bridge rehabilitating and preventive approaches; the latter is especially obvious, as there is a lack of studies that focuses on causes for sick leave, and how rehabilitative measures can have a preventive effect for other workers.

Based on these findings, we propose developing a multi-stakeholder perspective to encourage knowledge mobilization on how employers can organize rehabilitating and preventive measures, and bridge preventive activities to stakeholders outside the workplace. Given the state of the evidence, employer-oriented approaches to prevent CMD-related work disability not only seem relevant for improving RTW processes but also to prevent future sick leave. Closer engagement of employers in the development of sustainable preventive activities may also strengthen knowledge exchange between workplaces and welfare services (Ståhl 2010). Employers could be a driver for innovative prevention approaches and processes in relation to professionals in the welfare sector. This scenario would require awareness to employers' decision to insource, cosource, or outsource preventive activities. Among the Nordic countries, responsibility for RTW is often placed outside the workplace, rather than on insourcing or cosourcing systematic work disability management with the workplace as the central arena. The authors argue that this trend has been fuelled by administrative reforms of sickness benefit systems across the Nordic countries, which has not been able to support a shared understanding between welfare professionals and workplace stakeholders about the type of working

life conditions that are to structure sustainable RTW initiatives at work. In addition, many small businesses do not have established routines or resources to manage intersectorial collaboration (Gunnarson 2014), and do not have a designated RTW coordinator or strong ties with health care providers and/or social insurance providers (Ekberg 2016). Facilitating strong collaborative ties and common understanding around preventive activities is therefore a recurrent challenge for CMD-related work disability prevention. We suggest a renewed focus on how relevant expertise from existing stakeholders involved in occupational health and safety and occupational rehabilitation could be utilized better at an earlier stage.

Figure 3 illustrates the many relevant stakeholders of the occupational health and safety system and the occupational rehabilitation system that may help bridge CMD prevention initiatives to settings outside the workplace. The external occupational health and safety system includes (1) trade safety committee's, (2) occupational health and safety services, (3) the working environment authority, and (4) trade unions and employer associations. The external occupational rehabilitation system refers to four main stakeholders and settings, including (1) the physician and allied health care providers, (2) the social insurance provider, (3) inpatient or outpatient occupational rehabilitation centers, and (4) the occupational medicine clinics. The structure and role of stakeholders may differ across the Nordic countries and system context.

As illustrated in Figure 3, many relevant resources and experiences are not necessarily involved or utilized to help employers develop, adopt, and evaluate workplace initiatives in practice. Here, efforts remain to take into advantage community resources and consider new ways to utilize resources that are already in place among external parties but may not be used or thought of in the context of CMD-related work disability. One promising systematic intervention strategy with the potential to influence successful employer and stakeholder collaboration around CMD-related work disability is

Figure 3 Multistakeholder support model.
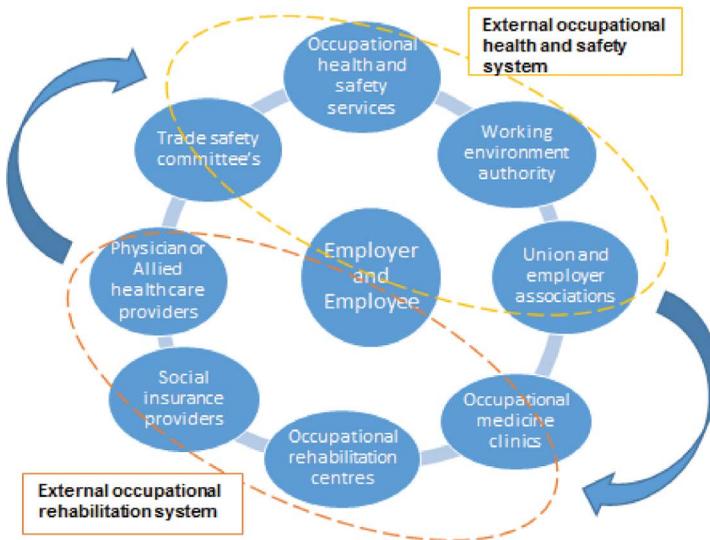
the concept of 'Disability Management' (DM) (Akabas 1992; Habeck 1998; Habeck & Hunt 1999). DM may be defined as 'a systematic and goal-oriented approach at the workplace which aims to simplify the RTW-process for persons with occupational disabilities through coordinated efforts, taking into account individual needs, workplace conditions and the legal framework' (NIDMAR 2000).[3] The goal of DM is to create workplace systems of management policies and practices (e.g., WDPM programs) (Gensby 2012), consisting of an integrated set of components promoting safe and timely RTW and sustained job retention within the work environment. A WPDM program therefore relates to conditions of the coordination of work accommodations and practical implementation of RTW activities, and rehabilitative interventions with the agreement of the worker, labor and management, and with the support of occupational health and safety services, allied health care, insurance and service providers, and coworkers.

During the last 20 years, the DM movement has gradually emerged as a way to encourage and support employers to take more control over injury and illness situations and subsequent RTW to promote sustained employment and control unnecessary workers' compensation and work disability cost (Akabas 1992; Habeck 1998). Today, DM is an internationally emerging research area (Geisen & Harder 2011; Harder 2014). Recently, DM has also manifested itself as a global workplace policy issue, through a 'code of conduct' drafted by the International Labor Organization (ILO), which establishes a set of principles for managing disability in the workplace (ILO 2002). Overall, DM may be understood as an umbrella term, covering a

• Theoretical concept (Geisen & Harder 2011; Harder 2014)
• Planned intervention/program (Gensby 2012, 2014)
• Counselling practice (Habeck 1994)
• Labour relations strategy (Jodoin & Harder 2004)

As a theoretical construct, DM remains modestly developed. However, DM may be seen in direct continuation of the work disability prevention paradigm (Loisel & Anema 2013). Given the multifaceted nature of work disability, planned DM interventions may be delivered by providers, both internal and external to the workplace. This means that interventions may be directed or initiated at the workplace and that the current implementation of these interventions may take place within the workplace-setting or in settings linked to the workplace (Gensby 2014). Employers and decision makers may use the multistakeholder support model to discuss how to create a DM system that balances stakeholder domains against each other to mobilize competencies and collaboration in a way that brings all stakeholders to the table (Hedlund 2007). Such future efforts ought to consider possibilities to unite the different preventive logics and competencies supported by new types of networks and relational coordination to ensure information flow and informed decision making (Gittell 2016). However, this would require interorganizational collaboration to be disciplined and creates new challenging questions about the type of ethical framework guiding the collaboration, the type of economic incentives needed for a fair distribution of economic accountability, and consideration of what parts of a DM system employers could insource, and/or cosource with external parties.

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[3] https://oshwiki.eu/wiki/Disability_Management

In work disability, innovative thinking and implementation of solutions is highly complicated due to the demands of institutional legal frameworks across health care, social insurance systems, and occupational health and safety. A continuous challenge is therefore to establish collaboration models and partnership initiatives to support employers and public authorities to invest time and resources in the development process. In our view, organizing research and practice partnerships in the context of a Triple Helix-model (Svensson 2009) could encourage exchange processes and knowledge sharing in which scientists and relevant stakeholders jointly formulate research needs and cocreate analyses and recommendations (Ellström 2008). From such efforts, new opportunities may rise to integrate principles and prevention approaches of occupational rehabilitation, social insurance systems, and the social partners in working life into a coherent DM model that may assist employers in costs control and meaningful service coordination, while protecting individual employability (Harder 2014). Future research also ought to consider how a DM approach aligns with current work environment legislation, and the corporatist approach of the 'Nordic Model', in which collective agreements and industrial relations can guide local policy and practice (Due & Madsen 2008). The role of collective agreements between labor unions and employers' associations has been studied as a strategy for the prevention of repetitive strain injury (Hasle 2004). However, studies are missing on how to utilize collective bargaining on principles for CMD-related work disability, and ways to use the local labor and management committee as a resource for developing and evaluating workplace initiatives.

Methodological considerations

The strengths of the study include the interactive research approach. We included various research experts and a diverse group of knowledge users with different backgrounds to give input the research question and discuss findings and implications for future practice-based research, policy and education. Additionally, we conducted a systematic interdisciplinary literature search across two research traditions with the assistance of an experienced research librarian. In practice, empirical evidence about workplace initiatives and organizational practices to prevent CMD-related work disability is rarely synthesized across psychosocial working environment research and DM research traditions to inform new employer preventive opportunities. Adopting a program theory approach in combination with a data-driven synthesis allowed us to carve out the underlying presumptions of how a RTW process can result in successful and sustainable environmental and personal outcomes. This includes an overview of the work-related components that constitute the initiatives as well as which key stakeholders that have been involved in the execution of the initiative, during the RTW process. The limitations of the study include lack of quality assessment of included studies to provide knowledge on what works in practice, which researchers and practitioners ought to consider when judging the program theory. Another issue is the decision to focus on the Scandinavian countries (Sweden, Norway, and Denmark). We are aware that there is a rationale for including all Nordic countries, since all Nordic countries have welfare states based on similar principles and share many elements in their approaches to promote mental health and RTW at the workplace. Thus, including other Nordic countries, such as Finland, could have added additional information to the study. Another potential limitation is the inclusion of studies with participants

with other diagnoses than CMD, which we considered relevant if they included participants with CMD and met our other selection criteria. This could potentially have obscured the results specific to the CMD group. In addition, some studies did not study specific initiative but were considered relevant since they provided valuable descriptions and exploratory insight to actual employer strategies toward CMD-related work disability prevention and/or RTW processes. Despite having a comprehensive approach to the literature, we cannot be sure that we captured all relevant studies within the scope of the review, and it is possible that the search strategy and selected databases may have impacted the search results. Lastly, we could have used more resources on reaching out to peers and searching the grey literature for relevant peer review studies.

Ethical considerations

A scoping review is secondary research and therefore exempt from requiring ethical approval. As a review author, you become responsible for providing a 'state of the art' representation of existing work. All steps taken, and criteria used to assess this work, therefore ought to be dealt with in an explicit and clear manner to ensure that data extraction and study details are reported carefully, and that neither data nor essential meaning are lost in the analysis. In addition, synthesis researchers find themselves 'spokesmen' for the research area they review and synthesize. The review team have strived to properly interpret, and acknowledge and cite fellow colleagues who conducted the original work (Petticrew & Roberts 2006). The review team are aware that commitment is required to publish synthesis results beyond traditional scientific journals to inform the broader research community and ensure proper knowledge transfer and exchange activities.

Conclusion

Scoping the field of research on workplace initiatives to prevent CMD-related work disability, we identified several key issues that cut across disciplinary preventive thinking. The included studies take up various elements of the program theory and present many valuable enhancements of our knowledge of the RTW process. However, even if some studies conclude that a comprehensive approach, including assessment of the causes to sick leave, individual support, relevant changes in job task, and relevant involvement of managers, coworkers, and external stakeholders are important to develop a strategy to prevent CMD, no studies adopting this type of comprehensive focus were found. There seems to be a lack of studies that include the process leading to sick leave in the study of RTW, which could help broaden the possibilities of early prevention. Focus on how the individual can be empowered to regain health and work ability are documented, as are interventions on workplace level. However, there are limited efforts on how to combine various workplace interventions, and their evaluation. There seems to be an evolving knowledge base on what aspects of the psychosocial work environment employers need to consider in the RTW process to probably accommodate workers with work disability. However, limited knowledge exists on how to implement a preventive approach that consider aspects of the psychosocial work environment in RTW problem-solving among stakeholders outside the workplace. Several different internal and external actors

and bodies play important roles in the RTW process, but studies that can include the relations and possible coordination and communication between such actors will without doubt enhance our understanding and our ability to propose further development of RTW strategies and practices. Importantly, there seems to be a huge potential in designing orchestrated interventions to consider the timing and content of other intervention programs outside the workplace. Prospectively, decision-makers and researchers could refine research questions to enhance employer strategies and knowledge sharing from a multi-stakeholder support approach that

- Emphasize the important role that the psychosocial work environment seems to play for RTW, particularly among workers with CMD compared with musculoskeletal disorders.
- Use the potential of including stress-prevention in RTW programs such as training and organizational development that are based on an understanding of the relation between the sources of work-related problems and the organizational design of the workplace.
- Consider the wider organizational and managerial elements of a workplace-based RTW approach, such as improving collective social support and the organizational capacity to manage accommodation at work.
- Consult how national RTW programs support the development of organizational-level interventions at work, including adjustment in work organization, technical improvements, and role clarity among workplace parties.
- Consider ways to promote a supportive relationship between the re-entering worker and the supervisor before RTW planning to facilitate meaningful communication between supervisors and the sick-listed worker during the RTW process.
- Consider how sick-listed workers' readiness for RTW is related to potential problems in the work environment, and the way supervisors respond to making adequate adaptations, both for the individual and for the work group to prevent future work disability.
- Target process challenges related to modification of work hours or work tasks according to individual work capacity, which is a change process that influences the whole organization, including coworkers' everyday working life.
- Consider how collaboration with external authorities and providers cuts across the various phases of the RTW process and what type of knowledge is needed to provide needed resources to achieve desired RTW outcomes.
- Emphasize the value of context tailored interventions focusing on a combination of improving individual capacity and changes in the work conditions based on information of the actual challenges in the work environment.

Acknowledgment and disclosures

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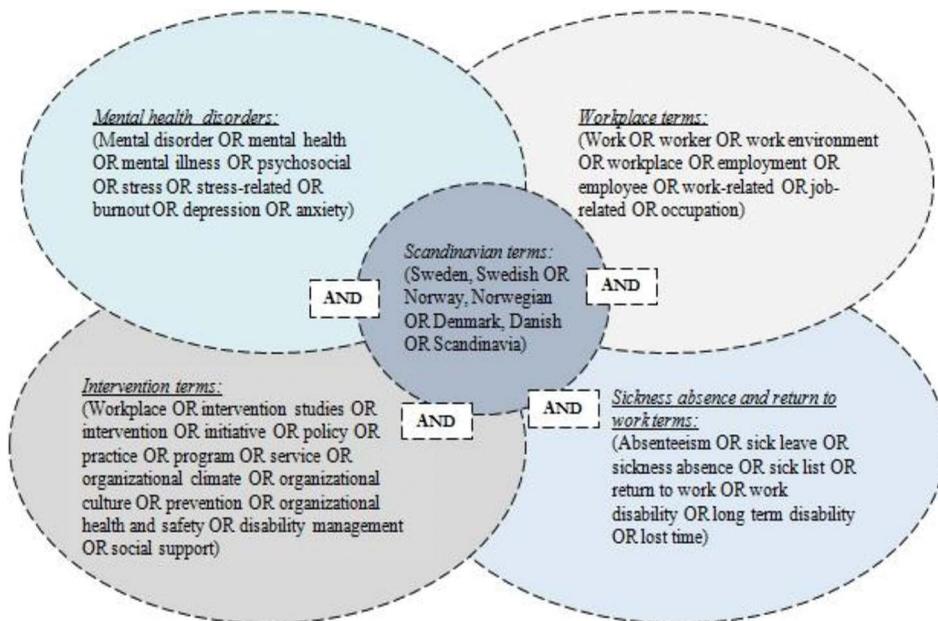
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Appendix 1: Venn diagram of search concepts and associated key terms

Mental health disorders:
(Mental disorder OR mental health OR mental illness OR psychosocial OR stress OR stress-related OR burnout OR depression OR anxiety)

Workplace terms:
(Work OR worker OR work environment OR workplace OR employment OR employee OR work-related OR job-related OR occupation)

Scandinavian terms:
(Sweden, Swedish OR Norway, Norwegian OR Denmark, Danish OR Scandinavia)

AND

AND

Intervention terms:
(Workplace OR intervention studies OR intervention OR initiative OR policy OR practice OR program OR service OR organizational climate OR organizational culture OR prevention OR organizational health and safety OR disability management OR social support)

AND

AND

Sickness absence and return to work terms:
(Absenteeism OR sick leave OR sickness absence OR sick list OR return to work OR work disability OR long term disability OR lost time)

Appendix 2: Inclusion criteria for study selection

Identifying relevant studies (Title and abstract screening)

- Is the study a peer reviewed research study? Yes/No?
- Is the study about sickness absence and/or RTW? Yes/No?
- Is the study targeting the magnitude of CMD disorders? (i.e. stress-related disorder/ psychological distress, anxiety, burnout, and/or depression) Yes/No?

Selection of relevant studies (Full text screening)

- Is the study using data sources from a Scandinavian setting (DK, NO, SVE)? Yes/No?
- Does the study include participants being in an employment relationship (i.e., full-time, part time, or reduced hours), and/or consider one or more workplace stakeholders in the development, implementation, or evaluation of preventive activities? Yes/No?
- Does the study address psychosocial working environment research about one or multiple workplace initiative (s) to prevent sickness absence due to CMD? Yes/No?
- Does the study address DM research about organizational policy and/or work practice implementation, or change (s) promoting RTW? Yes/No?

Study exclusion reasons

- Not peer-reviewed research study (i.e., conference presentation, or editorial)
- Not on sickness absence/RTW
- Not Scandinavian context/setting
- Severe psychiatric conditions (i.e., bipolar disorder, psychosis, and schizophrenia).
- Unemployed persons taking part in vocational rehabilitation, and/or people in early retirement preparing to move into or finding a job.
- Stand-alone clinical or social insurance interventions without direct involvement of the workplace, and/or a clear workplace initiative or work practice change to prevent CMD-related work disability.