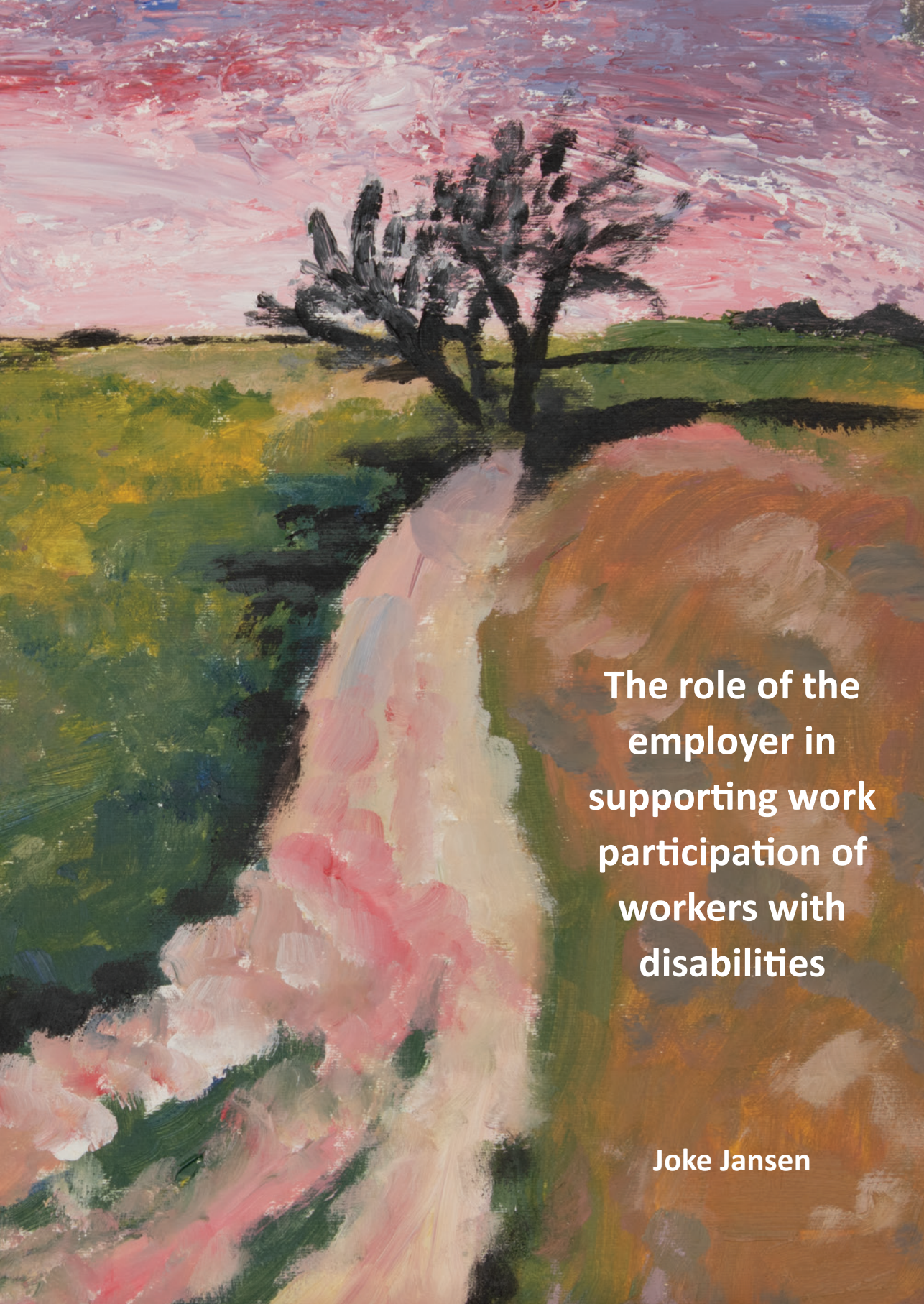

The role of the employer in supporting work participation of workers with disabilities

Joke Jansen

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Colophon

This research was supported by Instituut Gak (grant number 2018-933). The studies in this thesis were conducted within the Health in Context Research Institute of the University Medical Center Groningen (UMCG) and under auspices of the research program Public Health Research (PHR). The printing of this thesis was financially supported by the Graduate School of Medical Sciences (GSMS) of the UMCG and the University of Groningen.

Layout design: Arina van Londen | www.ridderprint.nl
Paintings by: Joke Jansen
Printed by: Ridderprint (www.ridderprint.nl)

rijksuniversiteit groningen

The role of the employer in supporting work participation of workers with disabilities

Proefschrift

ter verkrijging van de graad van doctor aan de
Rijksuniversiteit Groningen
op gezag van de
rector magnificus prof. dr. ir. J.M.A. Scherpen
en volgens besluit van het College voor Promoties.

De openbare verdediging zal plaatsvinden op

dinsdag 1 juli 2025 om 11.00 uur

door

Joke Jansen

geboren op 15 januari 1994
te Dinxperlo

Promotores

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Chapter 1

General introduction

Background

Over the last decades, the role of the employer in stimulating return to work and sustainable work participation of workers with disabilities has increased [1]. Several OECD (Organisation for Economic Co-operation and Development) countries have reformed their disability programs to foster labour market integration of people who face challenges staying or re-entering the workforce due to illness or disabilities [2]. This is warranted because several demographic trends, including an ageing population facing more (chronic) diseases and a tendency among the older workforce to leave the labour market due to disabilities, have resulted in growing governmental spending on disability insurance and health care costs [3]. Moreover, based on the premise that work has a therapeutic function of improving the health and well-being of workers with disabilities, policies also were based on striving for wellbeing through work [4]. The focus in disability policy on employment promotion rather than on systems of social protection reflects a strong belief that many of workers with disabilities have (only) partially reduced work capacity and could therefore continue working if adequately supported by their employer [2,5,6]. In this light, disability in the workplace is seen as a modifiable person–situation interaction, where workers with disabilities are encouraged to self-manage and take control of their lives including their work which can be supported by the work environment [7]. Along with that, employers are stimulated to accommodate or adapt job tasks for those with disabilities, and thereby support return-to-work (RTW) and sustainable work participation [8].

Employment rates of workers with disabilities

In the Netherlands and other OECD countries, employment rates for working-age persons with disabilities are significantly lower than for persons without disabilities, which in turn contributes to low income levels and high poverty rates [5,9,10]. In the late-2000s, the OECD employment rates of people with disabilities were just over 40% compared to 75% for persons without disabilities [2]. Despite the introduction of policies to stimulate workers in poor health to remain at work and employers to offer inclusive workplaces, recent OECD figures show that the employment rates of persons with disabilities are still much lower in comparison to those without disabilities in the industrialized countries. In particular, in 2018 the employment rate in the Netherlands for those with a disability was around 50% compared to 75% for people without disabilities [11].

Reports from the Dutch Social Security Institute (UWV) show that only a minority of the workers assessed with residual work capacity can stay or reintegrate and remain employed. Register data of the UWV show that of all individuals who have been granted a long-term disability benefit and are deemed to have sufficient residual work capacity, only 45% participate in paid employment [12]. Of those who are unemployed at the time

of the claim assessment, only 10% reintegrate in work [12]. In this context, the employers' effort to not only invest in the reintegration of long-term sick-listed employees but also to support them after they applied for disability benefits seems a critical factor for continued employment of employees with residual work capacity.

The low employment rates of (partially) disabled workers suggest that employment outcomes of people with disabilities are not only affected by their health conditions, but also by their work environment. Social models of disability such as the International Classification of Functioning, Disability and Health (ICF), conceptualize disability as the degree of activity limitation in a particular setting, such as the workplace [13]. These limitations partly arise from individual differences in physical/mental function or structures, and partly from the systemic factors that enable or disable people to work [14].

The role of the employer in the return-to-work (RTW) process

Since the employer is identified as a key player in the RTW process of workers with disabilities, there is growing notice that the work context plays an important role in preventing early labour market exit of workers with disabilities. Nevertheless, research focussing on the role of the employer in the RTW process is still scarce. There is strong evidence that perceived social support from work is an important determinant in the RTW process and work disability among a variety of working populations, e.g. low back pain [15–18], cancer [19,20] and mental health conditions [16,21]. Social support within and outside the workplace has contributed to the RTW process [22–25]. Regular contact and good communication with the employer, and real concern and support from co-workers and supervisors were identified as facilitators among workers with disabilities, whereas perceived lack of emotional support, especially lack of on-going support from supervisors, was seen as a barrier to the RTW process [26]. In addition, offering work accommodations or making adjustments has been found to improve job functioning, decrease the duration of return to work, remove job related barriers [27] and have been recognized as effective strategies for return to work and to prevent early labour market exit [16,28]. As such, both the social interaction between the supervisor and worker and the work environment may influence work participation of workers with disabilities [31]. Organizational return-to-work policies and practices seem another driver of work resumption [29], i.e., improving working conditions [29,30], minimizing the monetary cost of work absences or knowing the workers' intentions to RTW [31]. For employers there are several advantages to support workers with disabilities; these include amongst others worker loyalty, but also advantages related to being a good employer with an inclusive work culture [32].

Although these findings shed light on the role of the employer, supervisors and organizational level, knowledge about the RTW process of workers with disabilities is mainly based on studies adopting the perspective of the workers [29,33–35]. Detailed knowledge about the actual experiences of employers regarding their role in the RTW process, and the support needed by employers to fulfil their role is largely missing in the international scientific literature. Moreover, the focus of research on the role of the employer has generally been on the initial phase of the RTW process, i.e. from the onset of disability up to one year of sick leave [33,36]. Insight into the different types of employer support and whether the type of support may differ during the complete RTW process up to and after the disability benefit assessment has not been studied yet. A deeper understanding of the supportive role of the employer throughout the RTW process is essential for developing future interventions to encourage employers to facilitate workers with disabilities to continue in paid employment.

Aim of the dissertation and research questions

The general aim of this dissertation is to generate knowledge on the role of the employer in supporting workers with disabilities during the RTW process from the onset of sick-leave until the period after the disability benefit claim. To achieve the aim of the dissertation, we formulated the following three research questions:

1. What is the role of the employer in facilitating support for workers with disabilities to promote work participation? (Chapter 2, 3, 4)
2. How do workers with disabilities perceive employer support during the RTW process? (Chapter 5)
3. What are the differences between employers and workers in their perspectives regarding the implementation of work accommodations? (Chapter 6)

Definitions

For the purposes of this thesis, the following definitions of key concepts are used:

- *Workers with disabilities:* this dissertation focuses on workers with physical or mental disabilities who have been assessed after long-term sick leave (>2 years) during the disability claim assessment as having residual work capacity and receiving partial disability benefits.
- *Employers*: the term “employer” refers to the specific person who represents the organization that employs the workers with disabilities, supporting them during their

sickness absence and RTW; for example, the supervisor, case-manager or human resources manager (HR manager).

- *Return to work process:* with the return to work (RTW) process, the different phases of RTW are meant 1) the onset of sick leave, 2) the RTW phase and 3) the disability claim assessment phase.
- *Work participation:* this generic outcome measure includes continued employment as well as (partial) RTW into paid work.

Study setting

In the Netherlands, the RTW process takes two years, which is unique when compared to other countries in which this phase is considerably shorter [37]. During the first two years of sickness absence, employers are obliged to continue wage payment of their workers [37]. In addition, they have a shared responsibility to put effort into the RTW of the sick-listed worker. These responsibilities are described in the Gatekeeper Improvement Act (In Dutch: "Wet Verbetering Poortwachter"), which was implemented in 2002 by the government and provides a scheme of actions which has to be taken during the first two years of sickness absence [38]. In Figure 1 the Dutch context regarding the RTW process and the role of the occupational health services, the employer and worker is visualized.

First, an occupational health physician of the Occupational Health Services (OHS), hired by the employer, has to draw up a problem analysis within six weeks after the worker reporting ill if long-term sickness absence is suspected [38]. In the problem analysis, the situation of the worker is described with an emphasis on both the possibilities and the limitations of the worker [38]. Attention is paid to the prognosis regarding RTW and whether the worker can return to his own job or to another fitting job. Within two weeks after the problem analysis the employer and sick-listed worker have to formulate an action plan [38]. They describe which actions will be taken with respect to return to work and estimate when the sick-listed worker will be able to return to work [38]. In this context, the employers are obliged to provide modified work, or if reintegration remains unsuccessful, they should facilitate workers to find another suitable job, within or outside the organisation. The worker has a duty to inform the employer about illness as soon as possible; must co-operate with the employer and participate in the planning for RTW [39]. In addition, both the employers and sick-listed workers are obliged to have formal contacts with each other during the RTW process to discuss the RTW activities undertaken [40] and they are obliged to have a first year and a final evaluation about the RTW activities executed during the RTW process.

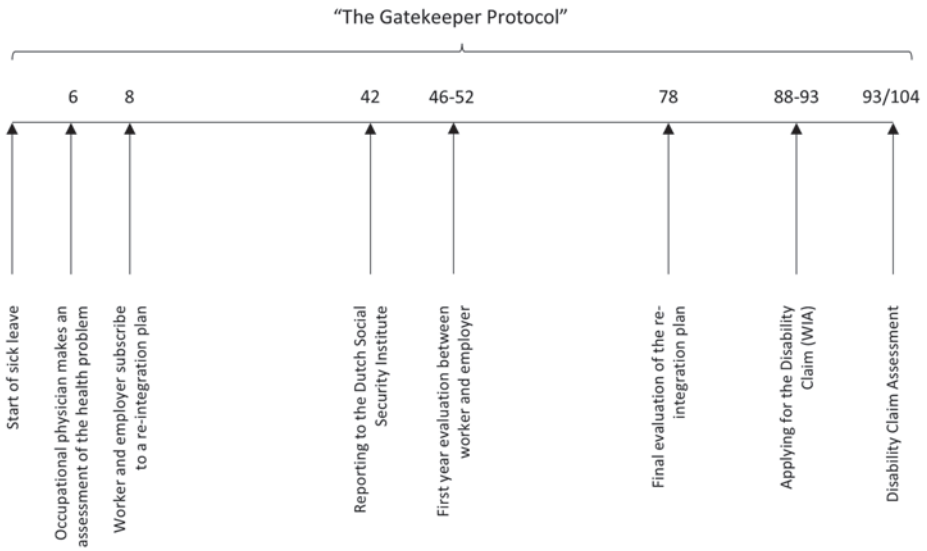

Figure 1. Schematic representation of the process (expressed in weeks) toward entering Disability Claim Assessment (adapted from De Jong et al. [41])

After the two-year sick leave period, workers who did not succeed to fully reintegrate into work can apply for a disability claim (in Dutch: WIA). This assessment is conducted by medical doctors and labour experts of the Dutch Social Security Institute (UWV) [42]. Before passing 'the gate' to the formal claim assessment, the Dutch Social Security Institute judges the sufficiency of the efforts made by the sick-listed worker and his/her employer. This ensures the quality of the RTW process, as well as that both the worker and employer have taken their responsibility to optimize the opportunities for RTW during the sick leave period. When insufficient efforts have been made, the application for disability benefits is delayed, and the employer and/or worker receive a financial sanction, depending on who has omitted to perform the necessary efforts to promote RTW. The employer continues to be responsible for the worker until he/she has returned to work or sufficient RTW activities were tried [43].

If sufficient efforts have been made, the actual disability claim assessment will be started, including a medical disability assessment to assess the functional limitations by an insurance physician and assessment of the earning capacity by a labour expert of the Dutch Social Security Institute (UWV). Individuals can either have a full work disability or a partial work disability [44]. Individuals in the latter group are deemed to have sufficient residual work capacity, i.e. persons that are considered to be able to continue working after the assessment, either partially or with work adjustments. These workers are incentivized

to continue working in paid (part-time) employment at their current employer or enrol in a new, more appropriate (part-time) job at their current employer or a new employer. Albeit that employers have no longer a formal responsibility to offer work accommodations for workers with (partial) disability benefits, they do have financial incentives for this. Since employers pay experience rated premiums that are based on disability benefit costs of (partially) disabled workers that are assigned to them, they have an interest in increases in the earnings capacity or the full work resumption of disabled workers [45,46].

Outline of this dissertation

The dissertation consists of multiple studies aiming to investigate the role of the employer in the different phases of the RTW process. In *Chapter 2*, a systematic literature review is conducted, investigating the employer characteristics associated with work participation of workers with disabilities. In *Chapter 3*, we present the findings of a survey study on employer perceptions on opportunities for accommodated work for workers with disabilities. In *Chapter 4*, employer perspectives on their supportive role in accommodating workers with disabilities to promote sustainable RTW were explored, using an interview study. In *Chapter 5*, workers' perspectives on employer support throughout the RTW process were explored, also by means of an interview study. In *Chapter 6*, discrepancies in reported work accommodations by workers with disabilities and their supervisors were assessed and whether these discrepancies were associated with full RTW, using existing data of a multisource survey study. In *Chapter 7,* the findings of this thesis are integrated and reflected on. Recommendations for further research are made, and implications of the findings for practice are discussed.

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Chapter 2

The role of the employer in supporting work participation of workers with disabilities: a systematic literature review using an interdisciplinary approach

Published as: Jansen, J., van Ooijen, R., Koning, P. W. C., Boot, C. R. L., Brouwer, S. The role of the employer in supporting work participation of workers with disabilities: a systematic literature review using an interdisciplinary approach.

Journal of Occupational Rehabilitation 2021, 31(4), 916-949.

Abstract

Purpose

There is growing awareness that the employer plays an important role in preventing early labour market exit of workers with poor health. This systematic review aims to explore the employer characteristics associated with work participation of workers with disabilities. An interdisciplinary approach was used to capture relevant characteristics at all organizational levels.

Methods

To identify relevant longitudinal observational studies, a systematic literature search was conducted in PubMed, Web of Science, PsycINFO and EconLit. Three key concepts were central to the search: (a) employer characteristics, (b) work participation, including continued employment, return to work and long-term work disability, and (c) chronic diseases.

Results

The search strategy resulted in 4456 articles. In total 50 articles met the inclusion criteria. We found 14 determinants clustered in four domains: work accommodations, social support, and organizational culture and company characteristics. On supervisor level, strong evidence was found for an association between work accommodations and continued employment and return to work. Moderate evidence was found for an association between social support and return to work. On higher organizational level, weak evidence was found for an association between organizational culture and return to work. Inconsistent evidence was found for an association between company characteristics and the three work outcomes.

Conclusions

Our review indicates the importance of different employer efforts for work participation of workers with disabilities. Workplace programs aimed at facilitating work accommodations and supervisor support can contribute to the prevention of early labour market exit of workers with poor health. Further research is needed on the influence of organizational culture and company characteristics on work participation.

Introduction

Several OECD countries reformed their disability programs over the past decades to foster labour market integration of people who face challenges staying or re-entering the workforce due to illness or disabilities [1]. These reforms primarily focused on the reintegration of workers with disabilities into employment; recognizing that many of them only have partially reduced work capacity and could therefore continue working if adequately supported by their employer [1–3]. Following these reforms the employment rates of people with disabilities has increased over the years [1,4]. This suggests that employment outcomes of people with disabilities are not only affected by their health conditions but also by their work environment [5].

As a result, there is growing awareness that the employers' organizational context plays an important role in preventing early labour market exit of workers with poor health. The organizational context is defined as the characteristics of a workplace, including the social, physical and organizational structure of a company [6]. As such, both the employers' disability management policies and practices and the social interaction between employers and employees may influence job retention of employees with disabilities [7]. An employer can, for instance, support employees with disabilities by offering workplace accommodations with the aim to improve job functioning, facilitate faster return to work, and remove job related barriers [8].

In occupational health care, several studies have been published about employer-related determinants and intervention strategies that improve labour market participation of workers with disabling health conditions. These studies in particular focus on workers with musculoskeletal disorders [9–12], mental health conditions [10,13] and/or cancer [14,15]. Besides company characteristics, supervisor support is often reported as an important employer-related determinant of return to work, however findings are mixed [9,13,14]. Employer-related intervention strategies in particular focus on workplace accommodations used by employers to recruit, hire, retain, and promote persons with physical disabilities, i.e. physical/technological modifications, accommodations to enhance workplace flexibility and worker autonomy and strategies to promote workplace inclusion and integration [16]. Rigorous evaluations of the effectiveness of these accommodations is not well-documented in peer reviewed literature yet [10,16]. Economic studies, on the other hand, often focus on the overall effectiveness of work accommodations regardless of the cause, across all types of health conditions, and frequently focus on the costs and benefits of different return-to-work programs, to learn what program works best. Another strength of the economics field is their use of largescale register data, adding knowledge to the field of occupational health. Each discipline and its corresponding research methods thus provides different insights about employer efforts and work participation of workers with disabilities, making

them complementary to each other. As the topic of employer support for workers with disabilities is being investigated by different disciplines, an interdisciplinary approach is crucial to obtain a complete overview.

Moreover, to get a better insight into the role of employers in supporting workers with disabilities to continue their jobs it is important take into account the role of the employer at all organizational levels. Rather than only focusing on work accommodations, as was the focus of previous reviews [16], we strive to include a broader range of employer efforts by integrating the existing evidence from different disciplines. Such an interdisciplinary approach requires a comparison of different types of work disabilities and work participation outcomes, because different outcomes and types of work disabilities are considered relevant in different disciplines. In addition, in contrast to other reviews we include longitudinal quantitative studies which allows us to summarize the evidence of the associations between prognostic factors at the employer level, and long-term work outcomes. Therefore, we will focus on three long-term work participation outcomes: return to work, continued employment and long-term disability. To date, such an integration of the existing evidence on prognostic factors at employer level from different disciplines has not been conducted.

Thus, this systematic review aims to explore the employer characteristics associated with work participation of workers with disabilities through an interdisciplinary approach including an occupational health, psychology and economic perspective.

Method

Search strategy

We conducted an interdisciplinary search using four databases: Pubmed, PsycINFO, Web of Science and EconLit (inception of databases until 17 April 2018). Pubmed was selected for its coverage of health and medicine-focused journals. PsycINFO was selected for its coverage of journals with a focus on psychology. Web of Science was selected for its coverage of occupational health journals. EconLit was selected for its coverage of economic journals. The key concepts used in the search strategy were developed by the research team with the support of a university librarian with an expertise on making systematic review searches. Three key concepts were central to the search: (a) employer characteristics; (b) work participation; and (c) chronic diseases. Synonyms were identified for each concept, including keywords and phrases as well as database-specific subject headings (e.g. MeSH headings) (online supplementary text S1). The search terms were adapted to each database to best utilize the search functionality and controlled vocabularies unique to each of them.

Selection of studies

Two independent reviewers (JJ, RvO) performed the selection of the studies in three screening phases. In the first phase, articles were excluded based on titles and abstracts. The systematic reviews application Rayyan was used for the initial screening of titles and abstracts [17]. All peer-reviewed journal articles were screened according to pre-defined criteria by the research team: (i) the study population consisted of workers with a chronic disease; (ii) the subjects were aged 18–67 years (i.e., working age population); (iii) the study used a longitudinal quantitative study design; (iv) the study examined continued employment, return to work after > 3 months of sickness absence, or long-term sickness absence (> 3 months) as the outcome variable; (v) at least one of the independent variables contains employer characteristics, including the role of professionals if they interact with the employer; and (vi) the article was written in English. As a consequence these articles are mostly from western countries. In the second phase, the reviewers selected articles for final inclusion based on full-text appraisal. Studies were excluded when both reviewers considered that these did not fulfil the inclusion criteria. Disagreements regarding inclusion were resolved by consensus. If no consensus was reached or in case of doubt, the article was screened by the other authors and discussed to reach consensus. In the third phase, references of included articles were checked for additional relevant articles and we checked for additional recently published articles from the field of economics because of its relatively lengthy publishing process.

Data extraction

Two reviewers (JJ, RvO) independently extracted the following characteristics from the included studies: study design, country of the study, scientific discipline, follow-up time, general description of subjects including age and gender, work disability type, outcome measures, employer characteristics and effect sign and size.

Assessment of quality

Two reviewers (JJ, RvO) independently assessed the methodological quality of the included studies using nine items [18,19]. This quality checklist is suitable for assessment of longitudinal observational studies [19]. Table 1 shows the standardized checklist for the quality assessment. Each item was scored positive (+) or negative (–). A negative score was seen as potential bias. The grading of each item was discussed between the reviewers to reach consensus. Based on the nine criteria, the studies were classified as being of high quality when meeting ≥ 8 criteria, medium quality when meeting 6–7 criteria, and low quality when meeting < 6 criteria [11].

Table 1. Checklist of methodological quality [18]

Potential biases	Quality assessment criteria
Objective	Positive if a clearly stated objective is described
Study population	Positive if the main features of the study population are clearly described
	Positive if the inclusion and exclusion criteria are clearly described
Outcome	Positive if outcome is register-based and if not register-based, the loss to follow up is limited (<20%)
	Positive if a clear definition of employment outcome is given
Determinant	Positive if adjusted for health-related confounders (health conditions/severity of the disease/pain level/work ability)
	Positive if age (if possible), gender (if possible), education and income are taken into account as confounders
Analysis	Positive if appropriate statistical model is used to evaluate data
	Positive if effect size of variables was presented or p-value 0.05 was shown or can be calculated

Evidence synthesis

A descriptive analysis was undertaken to synthesize the data, which consisted of four stages: grouping, clustering, transforming data and tabulation. Determinants were listed in a stepwise procedure per outcome measure: continued employment, return to work and long-term disability. First, an overview of all determinants that were studied in relation to the work outcomes was created. Determinants referring to the same concept were merged together. For example, the data extraction revealed different aspects of organizational culture, these were merged for evidence grading. Next, determinants were grouped into the following domains: work accommodations, supervisor support, and organizational culture and company characteristics. Thirdly, we harmonized the direction of effect sizes. Lastly, we summarized for each domain: (i) the total number of studies reporting on the factor, (i) the number of studies of low, moderate and high quality reporting on the factor, (iii) the scientific disciplines, and (iv) disability types.

Evidence grading

The level of evidence of the determinants was graded by using the rating system mentioned by de Croon et al. [9]. Ten different evidence levels were determined based on the number of studies and the directions of the effect size. The different evidence grading steps are shown in Fig. 1. Mixed results among the studies with a given outcome does not mean no effect; it means a mixture of negative and positive associations. The level of evidence was established per determinant.

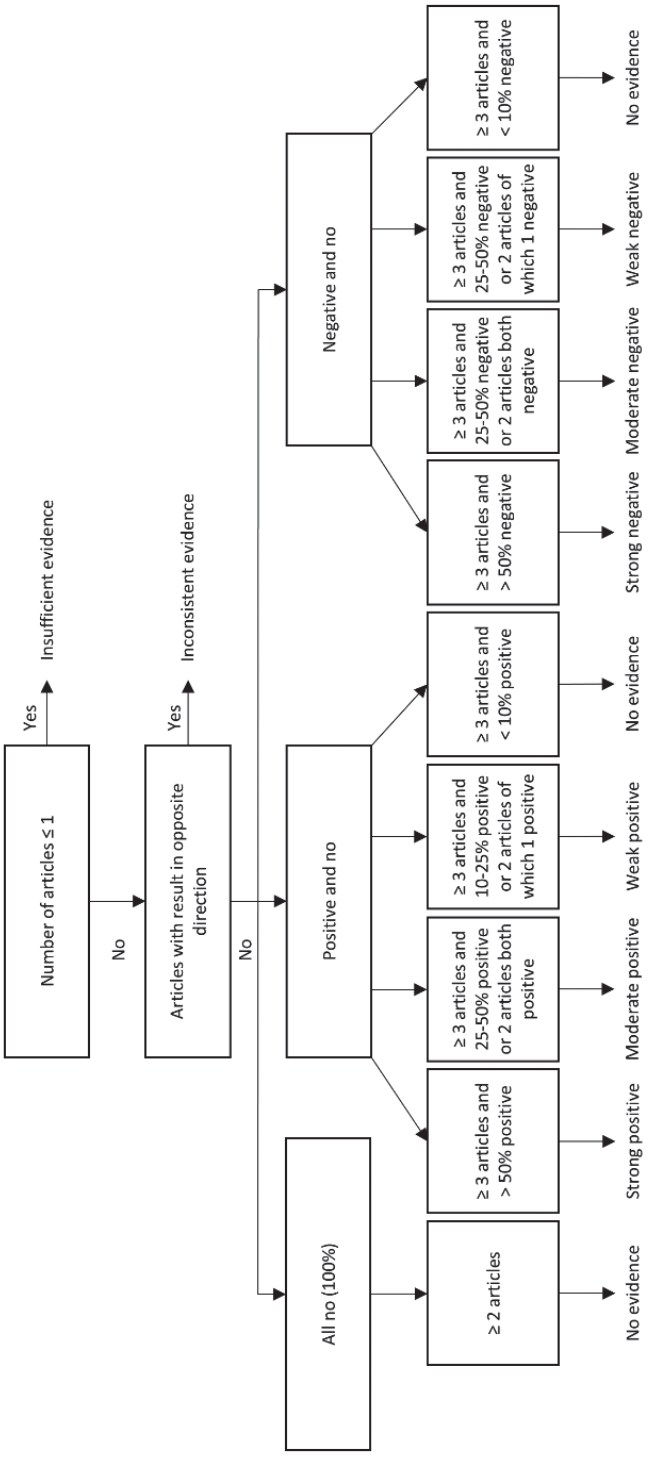

Figure 1. Evidence grading

Results

Selection of studies

The search strategy resulted in 4,456 articles, of which 2,817 were extracted from Pubmed, 2,734 from Web of Science, 1,140 from PsycINFO, and 37 from EconLit. After screening on titles and abstracts by the two reviewers, 4,251 articles were excluded. A total of 205 articles were selected for further screening. Finally, 38 articles met all inclusion criteria. Further reference checking identified an additional 12 articles, resulting in 50 included articles on 52 individual studies. Figure 2 presents the flow diagram of the selection of studies.

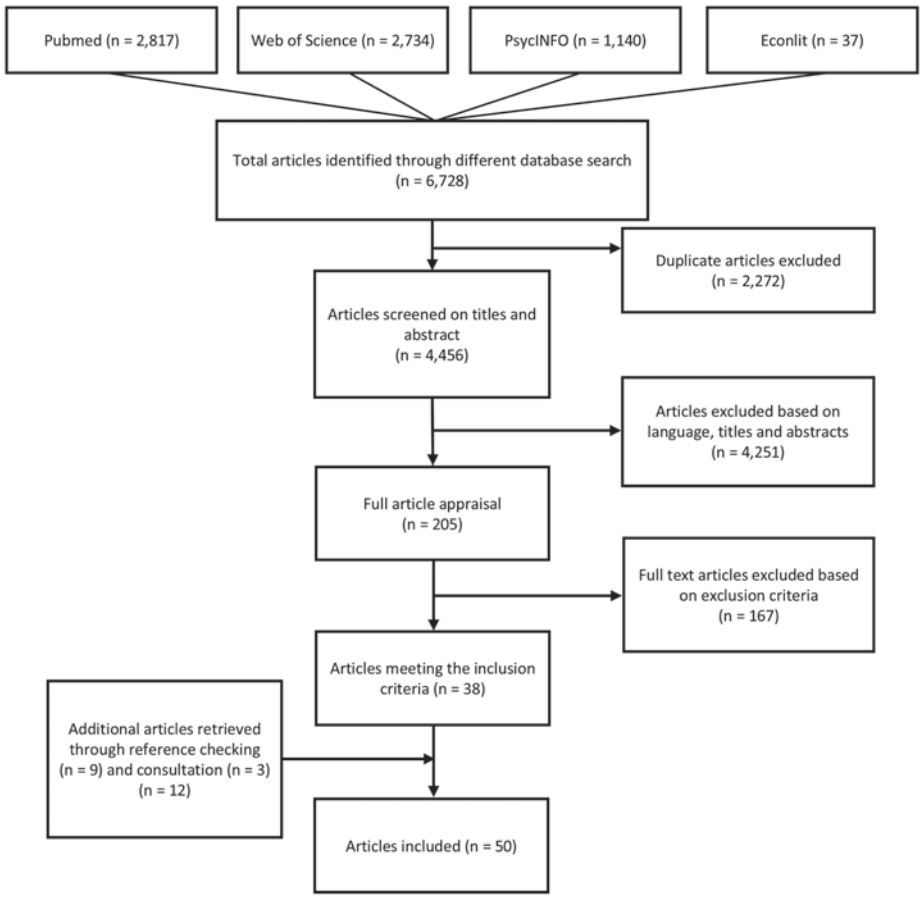

Figure 2. Flow diagram of the selection of studies

Study characteristics

The main characteristics of the included studies are presented in Table 2. Studies varied in work participation outcome measure, scientific disciplines and disability types. Of the 52 studies, 40 investigated determinants in relation to return to work outcomes, 11 studied determinants of continued employment and six studies used long-term disability as a work participation outcome. The economic discipline was represented in 15 studies; the medical discipline in 37 studies. Finally, 28 studies had a specific focus on one specific disability type: mental (n = 11), musculoskeletal (n = 7), cancer (n = 9), diabetes (n = 3), circulatory (n = 2) and nervous (n = 2). The other 20 studies had a broader focus, referred to as work-limiting health conditions. The effect sizes are reported in Table 2 in odds ratios (OR), hazard ratios (HR), rate ratios (RR), propensity score matching (PSM) and marginal effects (ME). The outcome column describes effect sizes of the association between the employer determinant and the outcome, measured at the indicated follow-up period.

Table 2. Study characteristics, employer determinants and work outcomes; Study outcome *(S = self-reported, R = register based) **(NR = not reported in the manuscript)

First author, year Country	Sample	Disability type	Scientific discipline	Time to follow-up	Outcome measure	Study outcome*	Employer determinant	Effect size, (95-CI/SE))
Amick, 2017 Canada [56]	Injured Ontario workers on sick-leave Aged 15+ 54.8% male	Musculoskeletal injury	Medical	6 & 12 months	Return to work 6 months	S	Organizational support	OR 1.77 (1.07; 2.93)
					Return to work 12 months			OR 2.07 (1.18; 3.62)
Anema, 2009 Denmark, Germany, Israël, Netherlands, Sweden, United States [33]	Sickness benefit claimants (> 3 months) Age: 18-59 39-74% male (six studies)	Lower back pain	Medical	2 years	Return to work	S & R	Adaptation workplace	HR 0.61 (0.52; 0.71)
							Job redesign	HR 0.57 (0.49; 0.66)
							Working hours adaptation	HR 0.67 (0.57; 0.78)
							Job/vocational training	NR** (insignificant)
							Therapeutic work resumption	HR 0.65 (0.55; 0.78)
Biering, 2015 Denmark [57]	Patients at Aarhus University Hospital treated with PCI on sickness absence >3 months Age: 25-67 86.2% male	Coronary Heart Disease	Medical	3 & 12 months	Return to work	S & R	Low recognition (rewards)	3 months: OR 2.57 (1.36; 4.86)
								12 months: OR 0.68 (0.33; 1.40)
							Low justice	3 months: OR 1.61 (0.89; 2.92)
								12 months: OR 1.15 (0.57; 2.32)
							Low social community at work	3 months: OR 1.55 (0.82; 2.90)
								12 months: OR 0.94 (0.47; 1.91)
							Low social inclusiveness	3 months OR 1.14 (0.60; 2.15)
								12 months: OR 0.81 (0.42; 1.57)

First author, year Country	Sample	Disability type	Scientific discipline	Time to follow-up	Outcome measure	Study outcome*	Employer determinant	Effect size, (95-CI/SE))
Blinder, 2017 United States [20]	Patients treated (stage I-III) at four hospitals and clinics in New York City (>4 months after treatment) Age 18-64 0% male	Breast cancer	Medical	4 months	Continued employment	S	Employer was accommodating	OR 2.96 (NR, significant)
							Employer size (<15, ref).	-
							Employer size (15-49)	OR 1.02 (NR, insignificant)
							Employer size (50 and more)	OR 2.65 (NR, significant)
Boot, 2014 Canada [46]	Injured workers on sick-leave having lost-time claims Working age 51% male	Musculoskeletal injury	Medical	12 months	Return to work	S	Positive supervisor response	OR 1.70 (1.17; 2.49)
Bouknight, 2006 United States [24]	Patients with a first primary diagnosis of breast cancer in Detroit area. (>12 months after diagnosis) Age 30-64 0% male	Breast Cancer	Medical	12 & 18 months	Return to work	S	Employer Accommodation	12 months: OR 2.2 (1.03; 4.8)
								18 months: OR 2.3 (1.06; 5.1)
Bryngelson, 2012 Sweden [35]	Workers on long-term (>90 days) sick leave having additional sickness insurance (public sector & manual workers) Age 20-61 17% male	Psychiatric disorder	Medical	3 years	Long-term sickness absence & Newly granted DI	S & R	Workplace-oriented rehabilitation	OR 0.81 (0.68; 0.96)
							Workplace-oriented rehabilitation & no change	OR 0.70 (0.59; 0.83)
							Change of occupation	OR 0.35 (0.27; 0.45)
							Workplace-oriented rehabilitation	OR 1.02 (0.81; 1.27)
Burkhauser, 1999 United States [31]	U.S. workers with a work limiting health condition (>1 year after sick-leave). Age 21-59 100% male	Work limiting health condition	Economic	up to 17 years	Long-term disability: Applying for DI	S & R	Accommodation (HRS)	HR -0.60 (SE 0.35)
							Accommodation (SDW)	HR -0.54 (SE 0.15)

First author, year Country	Sample	Disability type	Scientific discipline	Time to follow-up	Outcome measure	Study outcome*	Employer determinant	Effect size, (95-CI/SE))
Burkhauser, 1995 United States [25]	U.S. workers with a work limiting health condition (>1 year after sick-leave). Age 21-59 100% male	Work limiting health condition	Economic	up to 17 years	Continued employment: Job exit	S & R	Accommodation	HR -1.22 (NR, significant)
Cooper, 2013 United Kingdom [34]	Cancer Patients registered at out-patient departments of hospitals (>6 months after sick-leave). Aged 18+ 44% male	Breast, Gynaecological, Urological, Head and neck cancer	Medical	12 months	Return to work	S	Flexible working allowed	HR 1.70 (1.07; 2.70)
							Company size small (<60)	NR (insignificant)
							Company size, medium (60-100)	NR (insignificant)
							Company size, large (100 and more)	NR (insignificant)
Daly, 1996 United States [60]	U.S. workers with a work limiting health condition (>1 year after sick-leave). Age 51-61 57% male	Work limiting health condition	Medical	up to 17 years	Change employer	S	Number of workers (logarithm)	Men: OR -0.50 (SE 0.055)
							Number of workers (logarithm)	Women: OR -0.33 (SE 0.06)
					Stopped working		Number of workers (logarithm)	Men: OR 0.00 (SE 0.052)
							Number of workers (logarithm)	Women: OR 0.03 (SE 0.055)
De Vries, 2015 Netherlands [47]	Sick listed patients at occupational health services in Amsterdam (18 months after sick-leave) Age 18-65 55% male	Major depressive disorder	Medical	18 months	Work functioning	S	Supervisor support	NR (insignificant)

First author, year Country	Sample	Disability type	Scientific discipline	Time to follow-up	Outcome measure	Study outcome*	Employer determinant	Effect size, (95-CI/SE))
Dorland, 2018 Netherlands [44]	Cancer patients who resumed work for at least 12h/w > 3 months. Age 18-65 37% male	Cancer	Medical	n/a	Work functioning	S	Social support supervisor	ME 0.71 (0.29; 1.13)
Ekberg, 2015 Sweden [58]	Patients on sick leave for at least 3 months in Östergötland. Age 18-65 67% male	Common Mental Disorders	Medical	3 to 12 months	Return to work	S & R	Organizational culture (justice)	NR (insignificant)
Engström, 2007 Sweden [68]	Sick registered individuals (1-3 years after sick leave) in the county of Värmland. Working age population 23.5% male	stress-related psychiatric disorders	Medical	2 years	Return to work (partial)	R	County, health	OR 0.37 (NR, significant)
							Private	OR 0.64 (NR, insignificant)
							Municipality, education	OR 0.80 (NR, insignificant)
							Municipality, other	OR 0.83 (NR, insignificant)
							Municipality, health (elderly care)	OR 0.84 (NR, insignificant)
							County, other	OR 0.95 (NR, insignificant)
							Public, other (ref.)	-
					Return to work (full)		County, health	OR 0.42 (NR, insignificant)
							County, other	OR 0.73 (NR, insignificant)
							Private	OR 0.74 (NR, insignificant)
							Municipality, health (elderly care)	OR 0.89 (NR, insignificant)
							Municipality, education	OR 0.92 (NR, insignificant)
							Municipality, other	OR 1.09 (NR, insignificant)
							Public, other (ref.)	-

First author, year Country	Sample	Disability type	Scientific discipline	Time to follow-up	Outcome measure	Study outcome*	Employer determinant	Effect size, (95-CI/SE))
Ervasti, 2016 Finland, UK and France [48]	Employees with diabetes on sick-leave for at least 1 year. Working age population 28%, 70%, 76% male	Diabetes	Medical	1 to 5 years	Absence duration	S & R	Low supervisor support	Finland; Women RR 1.09 (0.74; 1.61)
							Low supervisor support	Finland; Men RR 1.23 (0.67; 2.65))
					Absence duration		Low supervisor support	UK; Women RR 1.33 (0.65; 2.74)
							Low supervisor support	UK; Men RR 1.27 (0.60; 2.67)
					Return to work		Low supervisor support	France; Women RR 1.82 (0.70; 4.73)
							Low supervisor support	France; Men RR 0.98 (0.43; 2.23)
Everhardt, 2011 Netherlands [26]	Workers on long-term sick leave (>9 months). Working age population 55% male	Work limiting health condition	Economic	18 months	Return to work	S	Accommodation (employer)	HR 1.89 (NR, significant)
							Accommodation (occupational health service)	HR 1.48 (NR, significant)
							Accommodation (other agency)	HR 0.76 (NR, significant)
							Return to work-plan	HR 1.25 (NR, significant)
Faucett, 2000 United States [32]	Patients in Santa Clara County (>18 months after sick leave). Working age population 24% male	Carpal tunnel syndrome	Medical	18 months	Active employment	S	Supervisor support	NR (insignificant)
							Employer size <250	OR 13.61 (1.24; 149.80)
							Work accommodation (work change)	OR 10.30 (1.12; 94.59)
					Job change (any)		Supervisor support	HR 0.71 (0.29; 1.78)
							Size	HR 1.64 (0.49; 5.46)
							Work accommodation (work change)	HR 1.13 (0.33; 3.88)

First author, year Country	Sample	Disability type	Scientific discipline	Time to follow-up	Outcome measure	Study outcome*	Employer determinant	Effect size, (95-CI/SE))
Franche, 2007 Canada [27]	Sick listed Ontario workers (>6months) at firms with workers' compensation coverage. Aged 15+ 53.4% male	Musculoskeletal	Medical	6 months	Return to work	S & R	Work accommodation offer rejected	HR 0.53 (0.39; 0.72)
							No work accommodation offered	HR 0.46 (0.38; 0.57)
							No contact between HCP and the workplace	HR 1.24 (NR insignificant)
							No advice from HCP to the workplace	HR 0.56 (NR significant)
							Ergonomic worksite visits	HR 1.44 (NR significant)
							Return to work coordinator	HR 0.84 (NR insignificant)
Frölich, 2004 Sweden [36]	Sicklisted workers in Western Sweden (>8 months). Working-age population 40% male	Work limiting health condition	Economic	8-42 months	Return to work	R	No rehabilitation (reference)	-
							Passive rehabilitation	PSM -12.0 (NR, significant)
							Workplace rehabilitation (vocational work training)	NR (insignificant)
							Educational rehabilitation	PSM -18.7 (NR, significant)
							Medical rehabilitation	PSM -7.8 (NR, significant)
							Social rehabilitation	NR (insignificant)
Gordon, 2014 Australia [62]	Newly-diagnosed patients in Queensland (12 months after sick-leave). Age 45-64 67% male	Colorectal cancer	Medical	12 months	Time to work resumption	S	Employer size <20 (ref.)	-
							Employer size (20-100)	OR 1.66 (1.09; 2.53)
							Employer size (>100)	OR 1.47 (0.83; 2.60)

First author, year Country	Sample	Disability type	Scientific discipline	Time to follow-up	Outcome measure	Study outcome*	Employer determinant	Effect size, (95-CI/SE))
Hannerz, 2012 Denmark [61]	Previously employed stroke-patients. Age 21-57 60.4% male	Stroke	Medical	2 years	Return to work	R	Employer size < 10 (ref. 250+)	OR 0.83 (0.73; 0.95)
							Employer size 10-49	OR 0.87 (0.77; 0.98)
							Employer size 50-249	OR 0.90 (0.80; 1.01)
Haveraaen, 2014 Norway [49]	Sick-listed employees who participated in return to work services. NR 23.9% male	Work limiting health condition	Medical	3 months	Return to work	S & R	Supervisor support (high)	OR 3.94 (1.57; 7.31)
Hill, 2016 United States [21]	Newly disabled workers. Aged 51+ 41% male	Work limiting health condition	Economic	2 & 4 years	Continued employment	S	Accommodation	2 years: ME 0.171 (SE 0.033)
							Accommodation - Work change	2 years: ME 0.273 (NR significant)
					Continued employment		Accommodation - Changes to time	2 years: ME 0.162 (NR significant)
							Accommodation - Equipment/assistance	2 years: ME 0.118 (NR significant)
					Continued employment		Accommodation - Other	2 years: ME 0.105 (NR significant)
							Accommodation	4 years: ME 0.045 (SE 0.037)
					Receiving DI/ Applying for DI		Accommodation	4 years: ME 0.017 (SE 0.032)
							Accommodation	4 years: ME -0.037 (SE 0.035)

First author, year Country	Sample	Disability type	Scientific discipline	Time to follow-up	Outcome measure	Study outcome*	Employer determinant	Effect size, (95-CI/SE))
Hogelund, 2006 Denmark [37]	Long-term sick-listed employees. Working-age population 44% male	Work limiting health condition	Economic	Up to 7 years	Return to work	S & R	Case management interview	HR 1.69 (SE 0.943)
					Return to work for pre-sick leave employer		Case management interview	HR 2.77 (SE 1.095)
					Return to work for new employer:		Case management interview	HR -0.73 (SE 1.694)
	Employees who did not participate in vocational rehabilitation				Return to work		Case management interview	HR 2.37 (SE 1.013)
					Return to work for pre-sick leave employer		Case management interview	HR 3.94 (SE 1.155)
					Return to work for new employer		Case management interview	HR -1.94 (SE 1.85)
					Return to work		Sector	NR (insignificant)
Hogelund, 2014 Denmark [22]	Long-term sick-listed employees. Working age population 36% male	Work limiting health condition	Economic	Up to 28 months	Ending employment	S & R	Workplace accommodations, current employer	HR -0.527 (SE 0.267)
							Reduced working hours, current employer	HR -0.476 (SE 0.314)
							New job, current employer	HR 0.021 (SE 0.424)
							Light duties, current employer	HR -0.273 (SE 0.463)
							Adaptations, current employer	HR −0.471 (SE 0.481)
							New employer	HR 0.592 (SE 0.254)
							Company size	NR (insignificant)
							Public sector company	HR -0.329 (SE 0.208)

First author, year Country	Sample	Disability type	Scientific discipline	Time to follow-up	Outcome measure	Study outcome*	Employer determinant	Effect size, (95-CI/SE))
Janssen, 2003 Netherlands [50]	Long-term sick-listed employees. Age 19-60 71% male	Work limiting health condition	Medical	4 months	Full return to work	S	Supervisor support	OR 1.40 (1.08; 1.83)
					Return to work with adjustments		Supervisor support	OR 1.17 (0.93; 1.48)
					Full return to work versus return to work with adjustments		Supervisor support	OR 1.18 (0.92; 1.51)
Katz, 2005 United States [51]	Patients in the state of Maine. Aged 18+ 42% male	Carpal tunnel syndrome	Medical	6 & 12 months	Work absence	S	Social support of supervisors	NR (insignificant)
							Number of employees	Return to work with adjustments: NR (insignificant)
							Organizational policies and practices (less supportive)	12 months: OR 2.94 (1.18; 7.34)
							Organizational policies and practices (less supportive)	6 months full return to work versus return to work with adjustments: NR (insignificant)
Kools, 2019 Netherlands [39]	Sick-listed employees assigned to a large private workplace reintegration provider. Working age population 53% male.	Work limiting health condition	Economic	1 & 2 year	Return to work 12 months	R	Graded return to work (first year)	ME 0.13 (SE 0.122)
					Return to work 24 months		Graded return to work (first year)	ME 0.08 (SE 0.109)
					Return to work 12 months		Graded return to work (first semester)	ME 0.38 (SE 0.125)
					Return to work 24 months		Graded return to work (first semester)	ME 0.07 (SE 0.104)

First author, year Country	Sample	Disability type	Scientific discipline	Time to follow-up	Outcome measure	Study outcome*	Employer determinant	Effect size, (95-CI/SE))
Lindbohm, 2014 Denmark [45]	Breast cancer patients. The data is from a cross-sectional dataset and the analyses is longitudinal retrospective. Age 25-57 0% male	Breast cancer	Medical	1-8 years	Non-employed (excl. early retirement)	S & R	Moderate support from the supervisor (ref. high)	OR 0.95 (0.43; 2.08)
							Weak support from the supervisor (ref. high)	OR 2.51 (1.10; 5.72)
Lund, 2006 Denmark [63]	Sick listed employees. Working age population 50% male	Work limiting health condition	Medical	1 year	Return to work	S & R	Private	HR 1.21 (1.04; 1.41)
							<20(ref.)	-
							20-100 (<20 baseline)	HR 0.86 (0.74; 1.00)
							> 100 (<20 baseline)	HR 0.86 (0.73; 1.00)
Markussen, 2011 Norway [64]	Sick-listed employees certified by a physician Age 30-60 NR	Work limiting health condition	Economic	1 year	Return to work (minor disease)	R	Firm with less than 20 employees	HR -0.02 (NR significant)
							Mining	HR -0.14 (NR)
							Transportation	HR -0.10 (NR)
							Agriculture	HR -0.05 (NR)
							Other	HR -0.04 (NR)
							Construction	HR -0.04 (NR)
							Health	HR -0.03 (NR)
							Public administration	HR -0.03 (NR)
							Wholesale & retail trade	HR -0.03 (NR)
							Education	HR -0.03 (NR)
							Recreation	HR -0.02 (NR)
							Professional & administrative services	HR -0.02 (NR)
							Accommodation & restaurants	HR -0.02 (NR)
							Information and communication	HR -0.01 (NR)
							Financial and insurance	HR -0.01 (NR)
							Manufacturing	HR -0.01 (NR)
							Real estate	HR -0.00 (NR)
							Utilities	HR 0.01 (NR)

First author, year Country	Sample	Disability type	Scientific discipline	Time to follow-up	Outcome measure	Study outcome*	Employer determinant	Effect size, (95-CI/SE))
					Return to work (major disease)		Firm with less than 20 employees	HR -0.12 (significant)
							Transportation	HR -0.13 (NR)
							Real estate	HR -0.12 (NR)
							Mining	HR -0.11 (NR)
							Wholesale & retail trade	HR -0.10 (NR)
							Education	HR -0.10 (NR)
							Professional & administrative services	HR -0.10 (NR)
							Public administration	HR -0.09 (NR)
							Financial and insurance	HR -0.08 (NR)
							Agriculture	HR -0.08 (NR)
							Other	HR -0.05 (NR)
							Information and communication	HR -0.05 (NR)
							Manufacturing	HR -0.04 (NR)
							Recreation	HR -0.03 (NR)
							Accommodation & restaurants	HR -0.03 (NR)
							Health	HR -0.02 (NR)
							Utilities	HR -0.00 (NR)
							Construction	HR 0.07 (NR)
Markussen, 2012 Norway [42]	Long-term sick-listed employees handled by the family doctor. Working age population 44% male	Work limiting health condition	Economic	24 months	Employment	R	Graded return to work	ME 0.21 (SE 0.03)
					Days on social security		Graded return to work	ME -102.30 (SE 8.2)
					Absence duration days		Graded return to work	ME -58.80 (SE 8.0)
Markussen, 2014 Norway [43]	Entrants into the temporary disability insurance program. Age 18-57 46% male	Work limiting health condition	Economic	12 months	Continued employment	R	Placement in regular firms, with or without individual support	ME 11.66 (SE 5.74)
					Long-term disability		Placement in regular firms, with or without individual support	ME -12.94 (SE 7.26)

First author, year Country	Sample	Disability type	Scientific discipline	Time to follow-up	Outcome measure	Study outcome*	Employer determinant	Effect size, (95-CI/SE))
Markussen, 2018 Norway [38]	Long-term sick-listed employees (after +/- 6 months) certified by a physician. Age 18-66 42% male	Work limiting health condition	Economic	12 months	Return to work (days)	R	Compulsory dialog meetings - high / mixed intensity	ME -20.30 (NR, significant)
							Compulsory dialog meetings - high / low intensity	ME -19.00 (NR, significant)
McLaren, 2017 United States [28]	Workers' compensation data from private and public firms.	Work limiting health condition	Economic	5 years	Return to work	S&R	Return to work program	HR 1.38 ((NR, significant)
							Modified work	HR 1.27 (NR, significant)
							Different job (same firm)	HR 0.70 (NR, significant)
							Scheduling accommodation	HR 1.22 (NR, insignificant)
							Modified equipment	HR 1.50 (NR, significant)
Mehnert, 2013 Germany [29]	Patients from cancer rehabilitation facilities. Age 18-60 14.3% male	Cancer (mainly breast cancer and gynaecological cancer)	Medical	12 months	Reemployment	S	Perceived employer accommodation	OR 1.93 (1.41; 2.65)
					Time to RTW		Perceived employer accommodation	HR 1.18 (1.06; 1.32)
Muijzer, 2011 Netherlands [52]	Employees applying for disability benefits after 2 years of sickness absence. Working age population 43% male	Physical or Mental	Medical	2 year	No return to work (full/partial)	S	Relationship employer/ employee (poor)	OR 14.59 (3.29; 64.71)
							Conflict with supervisor	NR (insignificant)
Netterstrøm, 2015 Denmark [53]	Patients on sick leave. Working age population 19.7% male	Work-Related Common Mental Disorders	Medical	1 year & 3 years	Return to work	S & R	Low support from leader	1 year NR (significant)
							Low support from leader	3 years NR (insignificant)

First author, year Country	Sample	Disability type	Scientific discipline	Time to follow-up	Outcome measure	Study outcome*	Employer determinant	Effect size, (95-CI/SE))
Neumark, 2015 United States [23]	Patients in eight centers in Virginia. Age 21-64 0% male	Breast cancer	Economic	9 months	Employment	S	Any accommodation	ME 0.019 (SE 0.05)
							Helper at work	ME 0.024 (SE 0.028)
							Shorter day	ME -0.030 (SE 0.029)
							Allowed schedule change	ME -0.008 (SE 0.044)
							Allowed more breaks	ME 0.037 (SE 0.034)
							Special transportation	ME -0.126 (SE 0.085)
							Job change	ME 0.008 (SE 0.039)
							Help learning new skills	(SE 0.046)
							Special equipment	ME 0.062 (SE 0.044)
							Assistance with rehabilitative services	ME 0.121 (SE 0.055)
Nielsen, 2012 Denmark [65]	Employees on sick leave in Copenhagen. Working age population 20.5% male	Mental health problems	Medical	52 weeks	Return to work	S & R	Size > 250	NR (insignificant)
							Municipal	0.62 (0.41; 0.94)
							Private (ref. governmental)	0.65 (0.44; 0.96)
							Governmental (ref)	-
Nieuwenhuijsen, 2004 Netherlands [40]	Patients on sick leave at nine occupational healthservice center & their supervisors. Working-age population 42% male	Mental health problems	Medical	1 year	Return to work (full)	S & R	Communication with employee	HR 1.7 (1.0; 2.8)
							Promoting gradual return to work	HR 0.8 (0.4; 1.5)
							Consulting with professionals	HR 0.6 (0.4; 1.0)
					Return to work (partial)		Communication with employee	HR 1.3 (0.8; 2.0)
							Promoting gradual return to work	HR 0.9 (0.5; 1.5)
							Consulting with professionals	HR 0.7 (0.5; 1.2)
Nieuwenhuijsen, 2006 Netherlands [54]	Sick listed workers from nine occupational health services. Working age population 40%	Common mental disorders	Medical	12 months	Full return to work	S & R	Supervisory support	HR 1.1 (NR, insignificant)

First author, year Country	Sample	Disability type	Scientific discipline	Time to follow-up	Outcome measure	Study outcome*	Employer determinant	Effect size, (95-CI/SE))
Prang, 2016 Australia [66]	Claimants (non-federal government). Age 15-70 44% male	Mental health condition (work related)	Medical	2 years	Return to work	R	Workplace size - small (ref. Government)	HR 0.81 (NR, significant)
							Workplace size - medium	HR 0.97 (NR, significant)
							Workplace size - large	HR 1.15 (NR, significant)
							Scientific and technical services	HR 0.72 (0.62; 0.92)
							Education	HR 0.74 (0.68; 0.80)
							Information and communication	HR 0.75 (0.62; 0.92)
							Financial and insurance	HR 0.76 (0.63; 0.91)
							Public administration	HR 0.77 (0.71; 0.83)
							Manufacturing	HR 0.79 (0.71; 0.87)
							Wholesale trade	HR 0.80 (0.69; 0.91)
							Agriculture	HR 0.81 (0.62; 1.07)
							Retail trade	HR 0.81 (0.71; 0.93)
							Real estate	HR 0.83 (0.68; 1.01)
							Construction	HR 0.87 (0.73; 1.03
							Administrative services	HR 0.87 (0.74; 1.03)
							Utilities	HR 0.88 (0.67; 1.15)
							Accommodation & food services	HR 0.89 (0.75; 1.05)
							Other services	HR 0.89 (0.78; 1.02)
							Mining	HR 0.92 (0.47; 1.77)
							Recreation	HR 0.92 (0.78; 1.10)
							Health (ref.)	-
							Transportation	HR 1.24 (1.11; 1.38)

First author, year Country	Sample	Disability type	Scientific discipline	Time to follow-up	Outcome measure	Study outcome*	Employer determinant	Effect size, (95-CI/SE))
Post, 2005 Netherlands [55]	Employees on sickness absence 18-63 50% male	Work limiting health condition	Medical	10 months	Return to work	S	Supervisor support (low)	RR 1.00 -
							Supervisor support (high)	RR 1.23 (1.02; 1.49)
							Health care and welfare services	RR 1.00 -
							Industry	RR 1.20 (0.96; 1.52)
							Trade	RR 1.07 (0.67; 1.70)
							Culture, recreation and other services	RR 0.89 (0.60; 1.34)
							Construction	RR 0.85 (0.62; 1.18)
							Other	RR 0.83 (0.48; 1.43)
							Public administration	RR 0.78 (0.57; 1.05)
							Transport	RR 0.78 (0.52; 1.16)
							Financial and commercial services	RR 0.74 (0.49; 1.13)
							Education	RR 0.46 (0.35; 0.61)
							Company size 1 – 9	RR 0.64 (0.39; 1.05)
							Company size 10 – 99	RR 0.79 (0.65; 0.94)
							Company size >100	RR 1.00 -
Schneider, 2016 Germany [41]	Sickness fund claimants Working age population 52% Male	Work limiting health condition	Economic	17 months	Return to work		Size <50 (ref.)	-
							Size 50–249	HR 1.02 (SE 0.5161)
							Size >250	HR 1.07 (SE 0.0013)
							Graded return-to-work program	Sickness absence <120 days HR <1.0 (NR, significant)
							Graded return-to-work program	Sickness absence >120 days HR >1.0 (NR, significant)

First author, year Country	Sample	Disability type	Scientific discipline	Time to follow-up	Outcome measure	Study outcome*	Employer determinant	Effect size, (95-CI/SE))
Schroër, 2005 Netherlands [59]	Employees on sick leave. Working age population 70% male	Work limiting health condition	Medical	15 months	Return to work	S	Private (ref. public)	OR 2.02 (significant)
							Size < 800 employees	OR 0.89 (0.41; 1.95)
							Job/employee oriented culture	OR 0.63 (0.31; 1.28)
							Process/result-oriented culture	OR 0.97 (0.45; 2.12)
							Open/closed culture	OR 1.82 (0.92; 3.36)
Smith, 2014 Australia [67]	Claimants receiving wage replacement. Working age population 58% male	Mental & Musculoskeletal	Medical	24 months	Days away from work	R	Small	Mental: HR 0.13 (SE 0.08)
							Medium (reference)	-
							Large/Government	Mental: HR -0.23 (SE 0.06)
							Small	Musculoskeletal: HR 0.43 (SE 0.04)
							Medium (reference)	-
							Large/Government	Musculoskeletal: HR -0.21 (SE 0.04)
							Healthcare	Musculoskeletal: HR -0.27 (NR)
							Education	Musculoskeletal: HR -0.26 (NR)
							Public administration	Musculoskeletal: HR -0.17 (NR)
							Retail trade	Musculoskeletal: HR -0.05 (NR)
							Other	Musculoskeletal: HR -0.03 (NR)
							Wholesale trade	Musculoskeletal: HR 0.00 (NR)
							Transport	Musculoskeletal: HR 0.04 (NR)
							Agriculture	Musculoskeletal: HR 0.06 (NR)
							Construction	Musculoskeletal: HR 0.22 (NR)
							Manufacturing (reference)	-

First author, year Country	Sample	Disability type	Scientific discipline	Time to follow-up	Outcome measure	Study outcome*	Employer determinant	Effect size, (95-CI/SE))
Turner, 2008 United States [30]	Claimants (who receive some wage replacement) Working age population 68% male	Back injury (work related)	Medical	12 months	Work disability	S& R	Job accommodation not offered	OR 1.91 (1.31; 2.76)
							Employer size	NR (insignificant)
							Mining (ref. trade & transportation)	OR 1.02 (0.42; 2.48)
							Construction	OR 1.88 (1.12; 3.17)
							Manufacturing	OR 1.98 (1.04; 3.77)
							Management	OR 1.08 (0.62; 1.89)
							Education/health	OR 0.92 (0.49; 1.74)
							Hospitality	OR 1.05 (0.58; 1.91)
Veenstra, 2018 United States [69]	Patients with stage III colorectal cancer Age >18 years 57% male	Colorectal cancer	Medical	12 months	Job retention	S	Employer-based health insurance	HR 2.97 (1.56; 6.01)
							Paid sick leave	HR 2.93 (1.23; 6.98)
							Extended sick leave	HR 1.41 (0.61; 2.12)
							Unpaid time off	HR 0.79 (0.44; 1.40)
							Disability benefits	HR 0.55 (0.27; 1.14)

Note: *(S= self-reported, R= register based) ** (NR= not reported) *** The data is from a cross-sectional dataset and the analysis is longitudinal retrospective.

Quality assessment

The results of the quality assessment are presented in Table 3. In total, 39 out of 50 articles (78%) were graded to be of high quality, whereas the other 11 articles (22%) were graded as medium quality. No low quality articles were found.

Employer determinants

In total, we found 14 determinants that could be clustered in the following four domains: work accommodations, social support, organizational culture and company characteristics (see Table 4).

Table 3. Results quality assessment

Key	Publication	1	2	3	4	5	6	7	8	9	Total score	Quality
1	Amick 2017 [56]	+	+	+	-	+	+	-	+	+	7/9	MQ
2	Anema 2009 [33]	+	+	+	+	+	+	+	+	+	9/9	HQ
3	Biering 2015 [57]	+	+	+	+	+	+	+	+	+	9/9	HQ
4	Blinder 2017 [20]	+	+	+	+	+	+	+	+	+	9/9	HQ
5	Boot 2014 [46]	+	+	+	-	+	+	-	+	+	7/9	MQ
6	Bouknight 2006 [24]	+	+	+	+	+	+	+	+	+	9/9	HQ
7	Bryngelson 2012 [35]	+	+	+	+	+	+	+	+	+	9/9	HQ
8	Burkhauser 1995 [25]	+	+	+	+	+	+	+	+	+	9/9	HQ
9	Burkhauser 1999 [31]	+	+	+	+	+	+	+	+	+	9/9	HQ
10	Cooper 2013 [34]	+	+	+	+	+	-	-	+	+	7/9	MQ
11	Daly 1996 [60]	+	+	+	+	+	+	+	+	+	9/9	HQ
12	De Vries 2015 [47]	+	+	+	-	+	-	-	+	+	6/9	MQ
13	Dorland 2018 [44]	+	+	+	-	+	+	+	+	+	8/9	HQ
14	Ekberg 2015 [58]	+	+	+	+	+	-	-	+	-	6/9	MQ
15	Engström 2007 [68]	+	+	+	+	+	+	+	+	+	9/9	HQ
16	Ervasti 2016 [48]	+	+	+	+	+	+	+	+	+	9/9	HQ
17	Everhardt 2011 [26]	+	-	+	-	+	+	+	+	+	7/9	MQ
18	Faucett 2000 [32]	+	+	+	+	+	+	-	+	+	8/9	HQ
19	Franche 2007 [27]	+	+	+	+	+	+	+	+	+	9/9	HQ
20	Fröhlich 2004 [36]	+	+	+	+	+	+	+	+	+	9/9	HQ
21	Gordon 2014 [62]	+	+	+	-	+	-	-	+	+	6/9	MQ
22	Hannerz 2012 [61]	+	+	+	+	+	+	+	+	+	9/9	HQ
23	Haveraaen 2014 [49]	+	+	+	+	+	+	+	+	+	9/9	HQ
24	Hill 2016 [21]	+	+	+	+	+	+	+	+	+	9/9	HQ
25	Hogelund 2006 [37]	+	+	+	+	+	+	+	+	+	9/9	HQ
26	Hogelund 2014 [22]	+	+	+	+	+	+	+	+	+	9/9	HQ
27	Janssen 2003 [50]	+	+	+	+	+	-	-	+	+	7/9	MQ
28	Katz 2005 [51]	+	+	+	+	+	+	-	+	-	7/9	MQ
29	Kools 2018 [39]	+	+	+	+	+	+	+	+	+	9/9	HQ
30	Lindbohm 2014 [45]	+	+	+	+	+	+	+	+	+	9/9	HQ
31	Lund 2006 [63]	+	-	+	+	+	+	+	+	+	8/9	HQ
32	Markussen 2012 [42]	+	+	+	+	+	+	+	+	+	9/9	HQ
33	Markussen 2011 [64]	+	+	+	+	+	-	+	+	+	8/9	HQ
34	Markussen 2014 [43]	+	+	+	+	+	+	+	+	+	9/9	HQ
35	Markussen 2018 [38]	+	+	+	+	+	+	+	+	+	9/9	HQ
36	McLaren 2017 [28]	+	+	+	+	+	+	+	+	+	9/9	HQ
37	Mehnert 2013 [29]	+	+	+	-	+	+	+	+	+	8/9	HQ
38	Muijzer 2011 [52]	+	-	+	+	+	-	+	+	+	7/9	MQ
39	Netterstrøm 2015 [53]	+	+	+	+	+	-	+	+	-	7/9	MQ
40	Neumark 2015 [23]	+	+	+	+	+	+	+	+	+	9/9	HQ
41	Nielsen 2012 [65]	+	+	+	+	+	+	-	+	+	8/9	HQ
42	Nieuwenhuijsen 2004 [40]	+	+	+	+	+	+	+	+	+	9/9	HQ
43	Nieuwenhuijsen 2006 [54]	+	+	+	+	+	+	+	+	+	9/9	HQ
44	Post 2005 [55]	+	+	+	+	+	-	+	+	+	8/9	HQ
45	Prang 2016 [66]	+	+	+	+	+	+	+	+	+	9/9	HQ
46	Schneider 2016 [41]	+	+	+	+	+	+	+	+	+	9/9	HQ
47	Schröer 2005 [59]	+	+	+	+	+	+	+	+	+	9/9	HQ
48	Smith 2014 [67]	+	+	+	+	+	+	+	+	+	9/9	HQ
49	Turner 2008 [30]	+	+	+	+	+	+	+	+	+	9/9	HQ
50	Veenstra 2018 [69]	+	+	+	-	+	+	+	+	+	8/9	HQ

Table 4. Overview of evidence grading per determinant

Domain	Determinants	Work participation outcome	Evidence	Nr. of studies	Ref. nr.	Quality assessment	Scientific discipline	Disability type
Work accommodation	1. Any accommodation	Continued employment	Strong+	5	[20–23,25]	High (n=5)	Economic (n=4) Medical (n=1)	Work-limiting health condition (n=3) Cancer (n=2)
		Return to work	Strong+	5	[24,26–29]	High (n=4) Medium (n=1)	Economic (n=2) Medical (n=3)	Work-limiting health condition (n=2) Cancer (n=2) Musculoskeletal (n=1)
		Long-term disability	Moderate+	3	[21,30,31]	High (n=3)	Economic (n=2) Medical (n=1)	Work-limiting health condition (n=2) Musculoskeletal (n=1)
	2. Work change	Continued employment	Moderate+	4	[21–23,32]	High (n=4)	Economic (n=3) Medical (n=1)	Work-limiting health condition (n=2) Cancer (n=1) Nervous (n=1)
		Return to work	Inconsistent	3	[28,33,35]	High (n=3)	Economic (n=1) Medical (n=2)	Work-limiting health condition (n=1) Musculoskeletal (n=1) Mental (n=1)
	3. Employer change	Continued employment	Inconsistent	1	[22,43]	High (n=2)	Economic (n=2)	Work-limiting health condition (n=2)
		Long-term disability	Insufficient	1	[43]	High (n=1)	Economic (n=1)	Work-limiting health condition (n=1)
	4. Time	Continued employment	Moderate+	3	[21–23]	High (n=3)	Economic (n=3)	Work-limiting health condition (n=2) Cancer (n=1)

Domain	Determinants	Work participation outcome	Evidence	Nr. of studies	Ref. nr.	Quality assessment	Scientific discipline	Disability type
		Return to work	Strong+	3	[28,33,34]	High (n=2) Medium (n=1)	Medical (n=2) Economic (n=1)	Work-limiting health condition (n=1) Cancer (n=1) Musculoskeletal (n=1)
	5. Workplace intervention	Return to work	Strong +	6	[26,33,35–38]	High (n=5) Medium (n=1)	Economic (n=4) Medical (n=2)	Work-limiting health condition (n=4) Musculoskeletal (n=1) Mental (n=1)
		Long-term disability	Insufficient	1	[35]	High (n=1)	Medical (n=1)	Mental (n=1)
	6. Graded return to work	Continued employment	Insufficient	1	[42]	High (n=1)	Economic (n=1)	Work-limiting health condition (n=1)
		Return to work	Weak+	4	[39–42]	High (n=4)	Economic (n=3) Medical (n=1)	Work-limiting health condition (n=3) Mental (n=1)
		Long-term disability	Insufficient	1	[42]	High (n=1)	Economic (n=1)	Work-limiting health condition (n=1)
	7. Professional assistance at work	Continued employment	Insufficient	1	[23]	High (n=1)	Economic (n=1)	Cancer (n=1)
		Return to work	Insufficient	1	[27]	High (n=1)	Medical (n=1)	Musculoskeletal (n=1)
	8. Professional assistance outside work	Continued employment	Insufficient	1	[23]	High (n=1)	Economic (n=1)	Cancer (n=1)
		Return to work	Inconsistent	3	[26,27,40]	High (n=2) Medium (n=1)	Economic (n=1) Medical (n=2)	Work-limiting health condition (n=1) Musculoskeletal (n=1) Mental (n=1)

Domain	Determinants	Work participation outcome	Evidence	Nr. of studies	Ref. nr.	Quality assessment	Scientific discipline	Disability type
	9. Equipment assistance	Continued employment	Weak+	3	[21–23]	High (n=3)	Economic (n=3)	Work-limiting health condition (n=2) Cancer (n=1)
		Return to work	Strong+	3	[27,28,33]	High (n=3)	Economic (n=1) Medical (n=2)	Work-limiting health condition (n=1) Musculoskeletal (n=2)
	10. Employer provided health/ sick leave / disability insurance	Continued employment	Moderate+	2	[20,69]	High (n=2)	Medical (n=2)	Cancer (n=2)
Social support	11. Supervisor support	Continued employment	Weak+	2	[32 ,45]	High (n=2)	Medical (n=2)	Cancer (n=1) Nervous (n=1)
		Return to work	Moderate+	14	[40,44,46,55,47–54]	High (n=8) Medium (n=6)	Medical (n=14)	Work-limiting health condition (n=3) Musculoskeletal (n=2) Mental (n=5) Diabetes (n=3) Nervous (n=1) Cancer (n=1)
Organizational culture	12. Organizational culture	Return to work	Weak+	5	[51,56–59]	High (n=2) Medium (n=3)	Medical (n= 5)	Work-limiting health condition (n=1) Musculoskeletal (n=1) Mental (n=1) Circulatory (n=1) Nervous (n=1)

Domain	Determinants	Work participation outcome	Evidence	Nr. of studies	Ref. nr.	Quality assessment	Scientific discipline	Disability type
Company characteristics	13. Company size	Continued employment/	Inconsistent	4	[20,22,32,60]	High (n=4)	Economic (n=1) Medical (n=3)	Work-limiting health condition (n= 2) Cancer (n= 1) Nervous (n=1)
		Return to work	Inconsistent	12	[34,41,52,55,59–67]	High (n=9) Medium (n=3)	Economic (n=2) Medical (n=10)	Work-limiting health condition (n=5) Musculoskeletal disorder (n=1) Cancer (n=2) Mental (n=3) Nervous (n=1) Circulatory (n=1)
		Long-term disability	Insufficient	1	[30]	High (n=1)	Medical (n=1)	Musculoskeletal disorder (n=1)
	14. Sector	Continued employment	Insufficient	1	[22]	High (n=1)	Economic (n=1)	Work-limiting health condition (n=1)
		Return to work	Inconsistent	9	[37,47,59,63–68]	High (n=9)	Economic (n=2) Medical (n=7)	Work-limiting health condition (n=5) Musculoskeletal (n=1) Mental (n=4)

Work accommodations

Work accommodation, defined in studies as having an accommodating employer or offered accommodations, was found to be related to continued employment [20–24] and faster return to work [25–29]. Moderate evidence was found for this determinant related to reduced long-term disability [21,30,31].

Nine different types of work accommodations were studied: work change, employer change, work-time change, workplace interventions, professional assistance at the workplace, professional assistance outside the workplace, graded return to work, equipment assistance, and employer provided health/disability insurance. There was moderate evidence that work change, defined as change in job tasks and change in work, was positively associated with continued employment [21–23,32]. Change in work time and flexibility in time scheduling was strongly positively associated with return to work [28,33,34]. There was less evidence pointing at effects of change in work time on continued employment [21–23] and employer change [22,43]. Workplace programs on guidance and support such as vocational work training, case management interviews and occupational health services was strongly positively associated with return to work [26,33,35–38]. In addition, we found weak evidence for a positive association between graded return to work programs and return to work [39–42], and a weak positive association between equipment assistance and continued employment [21–23]. Strong evidence was found between equipment assistance and return to work [27,28,33]. For return to work, we found inconsistent evidence for the following determinants: work change [28,33,35] and professional assistance outside the workplace [26,27,40].

For some determinants and outcomes, we did not find sufficient studies to assess the evidence. For continued employment, this was the case for the following determinants: graded return to work [42], professional assistance at work [23] and professional assistance outside the workplace [23]. For return to work, this concerns the determinant professional assistance at the workplace [27]. For long-term disability, this concerns the determinants employer change [43], workplace interventions [35], and graded return to work [42].

Social support

Social support includes measures of the relationship between the supervisor and the worker, measures of supervisor support and measures relating to the presence of conflicts between supervisor and worker. Weak evidence was found for a positive association with continued employment [32,45]. For return to work moderate evidence was found for this association [40,44,46–55]. No studies were found for long-term disability.

Organizational culture

Determinants related to organizational culture, like injustice, open versus closed culture, less supportive policies and practices were only studied in relation to return to work. The overall evidence for these determinants was weak [52,56–59].

Company characteristics

Two company characteristics identified in the included studies of interest were company size and sector. Inconsistent evidence was found for the associations between company size and continued employment [20,22,32,60] and return to work [34,41,47,52,59–67]. Insufficient evidence was found for long-term disability [30]. When comparing the public and private sectors, insufficient evidence was found for the association between the sector of employment and continued employment [22]. Furthermore, inconsistent evidence was found for the association between sector of employment and return to work [37,47,59,63–68]. No studies were found for long-term disability with regard to sector.

Discussion

In this systematic literature review, we explored the determinants at employer level associated with continued employment, return to work, and long-term work disability of workers with disabilities. Our findings indicate that organizational efforts on both supervisor level (i.e., work accommodations, support) and higher organizational levels (i.e., culture, policy), as well as company characteristics (i.e., sector, company size) can influence these work outcomes. At supervisor level, strong evidence was found for work accommodations. In addition, weak to moderate evidence was found for social support. Evidence for employer efforts at higher organizational levels was weak. Evidence for an association between company characteristics and continued employment, return to work and long-term disability was inconsistent.

Supervisor level: work accommodations

At supervisor level, our findings indicate that providing work accommodations is positively associated with continued employment and return to work, and negatively with long-term disability. The strength of evidence differed between work accommodation categories and the three work outcomes. We found strong evidence for the benefits of work accommodations concerning adaptations to work schedules for return to work, such as having the option to choose for flexible working hours [34] and to reduce working hours [28, 33]. We also found strong evidence for work accommodations concerning workplace adaptations, like the provision of a laptop computer that allowed workers to work from home [28], and changes in furniture at the office or workstation [27,28,33]. Moreover, we found strong evidence for work accommodations concerning interventions that

aim to provide workers with additional support and guidance associated with return to work [26,28,33,35–38]. These interventions focused on providing a workplace-oriented rehabilitation program like vocational work training or educational training, but also on providing occupational health services and case management interviews. We found moderate evidence for work accommodations regarding employer-provided changes in work in relation to continued employment [21–23,32] which consisted of modifications to either work activities and duties [21,23,32] or the offer of a new job in the same company [22]. Additionally, we found moderate evidence for an association between employer-provided disability insurances [20,69] and continued employment. For long-term work disability, we found insufficient evidence for work accommodations, which can be explained by the low number of articles available for this outcome.

The finding that offering work accommodations facilitates work participation is in line with previous reviews that reported on the evidence for adaptations to work schedules, providing equipment and modifications to work activities [6,10,16,70–73]. However, most reviews studied work accommodations in relation to returning to work after sickness absence, but did not consider associations with continued employment and long-term work disability. For example, we found evidence that modifications to work activities are not only helpful for workers returning to work [73], but are also important in the context of staying employed after the onset of work disability. Our findings are consistent across different causes of work disabilities.

Supervisor level: social support

We found moderate evidence that social support from supervisors was related to return to work. Social support was operationalized as supervisor support as perceived by the worker [49–52,54], a positive relation between supervisor and worker [53] and the supervisors' communication with and response to workers [40,46]. We found weak evidence for an association of social support from supervisors with continued employment [32,45], which may be explained by the low number of included studies on this outcome. There were no articles included with long-term work disability as outcome.

The finding that social support facilitates work participation is consistent with several reviews [74–76] which found moderate-to-strong evidence for a positive relation between supervisor support and a shorter duration of sick leave, and reduction of workplace disability. However, two previous reviews on return to work, found no evidence for a positive relation of social support with return to work (yes/no) [77,78]. This may be explained by the lower number of studies included in those return to work reviews compared to our study, as a consequence of these studies focusing on a specific disease group (e.g. cardiovascular disease and mental health). Compared with these two prior

reviews, our review adds evidence concerning particular relational aspects of social support that are relevant for work participation of workers with all kind of work disabilities.

Organizational level: culture

At organizational level, we found weak evidence for a positive association between organizational culture and return to work. Organizational culture includes a variety of determinants regarding the nature of the organizational culture (e.g. a people oriented culture, process or result oriented culture, open or closed culture, reward system, justice within an organization) [57–59], as well as determinants regarding organizational policies and practices (e.g. disability management programs and ergonomic policies) [52,56]. No articles were included with either continued employment or long-term work disability as outcome.

There are some reviews on policies and practices (e.g. workplace disability management programs) that found insufficient evidence for an association with return to work [79,80]. These reviews concluded that conclusions could not be made due to lack of evidence and high risk of bias in their included studies. Overall, more research on this topic is needed, as only a few studies could be included in our review. Moreover, there is a large variety in measurement of organizational culture across studies, as culture seems difficult to capture in questionnaires [81].

Comparison of findings between types of diseases

In this systematic review, we included studies on workers with a broad range of disease groups. Because we included studies with different diseases we could provide an overview of prognostic factors that are relevant across different diseases, without specifically studying for differences between the disease groups. In almost half of these studies, the study population was defined as workers with work-limiting health conditions, i.e. all kinds of disability types were included and no distinction was made between the types of diseases. These studies were often found in the economic database. In contrast, studies from the field of medicine, occupational health and psychology often focused on a specific disease group, and included workers with a specific disability type, like mental health [35,40,48,53,58,65,66,68], musculoskeletal disorders [27,33,46,56,67], and cancer [20,25,29,34,44,45,62].

Comparison of the studies showed that studies including workers with work-limiting health conditions mainly focused on the employer-domains work accommodations and company characteristics. For the disease-specific studies, we found that studies on mental health mostly focused on social support and company characteristics, whereas studies

on musculoskeletal disorders and cancer mainly focused on work accommodations and company characteristics.

Comparison of the evidence showed that all studies including workers with work-limiting health conditions found positive evidence for an association between social support and work [47,50,51], whereas seven out of eleven studies on specific disease groups, like mental health, musculoskeletal disorders and cancer, found insignificant evidence for this association [32,40,44–49,52–55]. We did not find any differences in evidence for specific work accommodations between the disease groups, nor between the specific disease groups in relation to the outcomes. This is in line with a previous study on supervisor competencies for supporting return to work following absence due to a mental health condition or a musculoskeletal disorder that showed that supervisor competencies relevant for return to work did not differ between workers with different chronic diseases [82]. Due to the low number of included studies on organizational culture, it was not possible to further analyse these findings. For the domain company characteristics, most studies found insignificant or even inconsistent evidence. For this reason, differences between generic and disease-specific studies and between disease groups were not studied.

Strengths and limitations

A strength of this review is that we included determinants of work participation at both supervisor level and organizational level. This provides a comprehensive overview of relevant employer determinants on different employer levels, in which context both the supervisor and organizational level plays a role.

Another strength of this review is that we only included longitudinal quantitative studies, which allowed us to summarize the evidence of the associations between the employer determinants and the work outcomes. However, the decision to exclude studies with a qualitative design entails that we excluded studies that could have provided more in-depth information about determinants like organizational culture and policies and practices.

Moreover, a strength of this review is the interdisciplinary perspective. Every included scientific field had their own contribution to our research topic. The economic studies primarily focused on continued employment, while medical and occupational health studies focused more on the return to work outcome. In the economic literature, the scope of studies was mostly on work accommodations and company characteristics, whereas the medical field focused on all the different employer domains. Furthermore, the economic studies mostly included data related to workers with work-limiting disabilities, whereas the medical, psychological and occupational health studies generally used data related to workers of specific disease groups. The inclusion of studies from these different fields enabled us to compare different outcome measures. The large consistency of the

findings across the different outcome measures, makes us more confident about the strength of the presented evidence in our review, but also illustrate the added value of our interdisciplinary approach.

This study also has some limitations. In the field of economics it is common to publish working papers of submitted manuscripts because of the relatively long publishing process. In consequence of the decision not to include working papers we might have missed relevant recent papers from the economic perspective. Furthermore, we excluded studies in languages other than English and all included studies were from high-income countries. Consequently, we might have missed some useful studies from non-western countries, which may restrict the generalizability of the findings.

Implications for practice and future research

This review supports the assumption that the employer has a role in work participation of workers with disabilities. In particular, various work accommodations and supervisor support were found to be important for return to work and continued employment. However, for some work accommodations, like change of employer, job change, and professional assistance at- and outside of work, more research is needed on the impact on continued employment, return to work and long-term disability. Additionally, although supervisor support is a consistent determinant across the studies, further quantitative research is needed on supervisor support, which may include other aspects of social support, like instrumental or emotional support. Future research should therefore focus on the association between work outcomes and aspects of social support that have been found to be important in other studies. In this study, we cannot draw strong conclusions on the influence of culture and policies and practices due to the limited number of studies on organizational culture and organizational policies and practices, and the inconsistent measurement of organizational culture. Similarly, we found inconsistent evidence for company characteristics, which might be due to different classifications of company size and sector of employment. As organizational culture, policies and practices, and company characteristics could be important facilitators for employer support, further research is needed on the influence of these higher organizational levels on continued employment, return to work and long-term disability. Especially, more research is needed on how to measure the aspects of organizational culture that may be relevant for continued employment, return to work and long-term disability.

Conclusion

This systematic literature review including studies from the economic, medical, psychological and occupational health field shows that employer support enables workers with disabilities to continue employment and return to work or reduce the likelihood of long-term work disability. Employer support entails organizational efforts on supervisor level and organizational level, as well as the role of company characteristics. This review especially shows positive evidence for the facilitation of work accommodations and for support of supervisors in relation with the above mentioned work outcomes. The evidence seems to be valid across studies that focused on specific and generic disease groups. Despite the weak evidence for organizational culture and inconsistent evidence for company size and sector of employment, our review indicates the importance of employer efforts on different organizational levels for preventing early labour market exit of workers with poor health. We found consistent evidence for a positive effect of efforts on supervisor level on the work participation outcomes. The role of organizational culture is less clear due to a weak level of evidence. However, as organizational culture is found to be important in qualitative studies, more research is needed on factors related to this concept. In this context, it is important for future longitudinal studies to achieve more consensus on the measurement of social support and organizational culture and policies.

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Supplementary files

Search strategy

Search strategy Pubmed

#1 ("Chronic Pain"[Mesh] OR "Cardiovascular Diseases"[Mesh] OR "Diabetes Mellitus"[Mesh] OR "Fatigue Syndrome, Chronic"[Mesh] OR "Muscular Diseases"[Mesh] OR "Joint Diseases"[Mesh] OR "Rheumatic Diseases"[Mesh] OR "Multiple Sclerosis"[Mesh] OR "Pulmonary Disease, Chronic Obstructive"[Mesh] OR "Back Pain"[Mesh] OR "Neoplasms"[Mesh] OR "Asthma"[Mesh] OR "Headache Disorders, Primary"[Mesh] OR "Digestive System Diseases"[Mesh] OR "Nervous System Diseases"[Mesh] OR "Anxiety Disorders"[Mesh] OR "Bipolar Disorder"[Mesh] OR "Cyclothymic Disorder"[Mesh] OR "Depressive Disorder, Major"[Mesh] OR chronic illness*[tiab] OR chronic disease*[tiab] OR chronic pain[tiab] OR cardiovascular disease* [tiab] OR diabetes[tiab] OR chronic fatigue syndrome[tiab] OR musculoskeletal disease*[tiab] OR rheumatic disease*[tiab] OR pulmonary disease*[tiab] OR back pain[tiab] OR back problem[tiab] OR cancer[tiab] OR COPD[tiab] OR asthma[tiab] OR heart diseas*[tiab] OR depression[tiab] OR anxiety disorder*[tiab] OR disorder*[tiab] OR disease*[tiab] OR disabled*[tiab] OR diagnosis[tiab] OR impairment[tiab])

#2 ("Organizational Culture"[Mesh] OR "Organizational Policy"[Mesh] OR "Workplace"[Mesh] OR workplace*[tiab] OR work environment[tiab] OR organizational culture[tiab] OR organizational policy[tiab] OR organizational support[tiab] OR organisational culture[tiab] OR organisational policy[tiab] OR organisational support[tiab] OR employer*[tiab] OR supervisor*[tiab] OR worksite*[tiab] OR work accommodation[tiab] OR Human resource manage*[tiab] OR case manageme*[tiab])

#3 ("Return to Work"[Mesh] OR "Rehabilitation, Vocational"[Mesh] OR "Absenteeism"[Mesh] OR "Sick Leave"[Mesh] OR "Presenteeism"[Mesh] OR return to work[tiab] OR back to work[tiab] OR continuing work[tiab] OR continued work*[tiab] OR vocational rehabilitation[tiab] OR work ability[tiab] OR work participation[tiab] OR "Work Engagement"[Mesh] OR job retention[tiab] OR early retirement[tiab] OR labor force exit[tiab] OR job exit[tiab] OR absenteeism[tiab] OR sick leave[tiab] OR work absence[tiab] OR work disability[tiab] OR employment outcome*[tiab] OR work productivity[tiab] OR labor participation[tiab] OR labour participation[tiab] OR labor supply[tiab] OR labour supply[tiab] OR wage[tiab])

Search strategy Web of Science

TS="chronic pain" OR TS="diabetes mellitus" OR TS="fatigue syndrome" OR TS="multiple sclerosis" OR TS="back pain" OR TS="cancer" OR TS="asthma" OR TS="depression"

OR TS="chronic illness" OR TS=disorder* OR TS=disease* OR TS=disabled OR TS=diagnosis OR TS=impairment

AND

TS="organi?ational culture" OR TS="organizational policy" OR TS="organizational support" OR TS="work environment" OR TS=workplace OR TS=employer* OR TS=supervisor* OR TS="work accommodation" OR TS=worksite OR TS="human resource manager" OR TS="human resource managers" OR TS="human resource management" OR TS="case management" OR TS=case manager OR TS=case managers

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TS="return to work" OR TS="vocational rehabilitation" OR TS=absenteeism OR TS="sick leave" OR TS=presenteeism OR TS="back to work" OR TS="continuing work" OR TS=”continued work” OR TS="work ability" OR TS="work participation" OR TS="work engagement" OR TS=”job retention” OR TS=”early retirement” OR TS=”labor force exit” OR TS=”job exit” OR TS=”work absence” OR TS=”work disability*” OR TS=“employment outcome” OR TS=work productivity OR TS=labo?r participation OR TS=labo?r supply OR TS=wage

Search strategy PsycINFO

#1 DE: "Chronic Illness" OR "Chronic Fatigue Syndrome" OR "Chronic Mental Illness" OR "Chronic Pain" OR "Diabetes Mellitus" OR "Musculoskeletal Disorders" OR "Multiple Sclerosis" OR "Cardiovascular Disorders" OR "Lung Disorders" OR "Back Pain" OR "Rheumatoid Arthritis" OR "Neoplasms" OR "Asthma" OR "Chronic Obstructive Pulmonary Disease" OR "Mental Disorders" OR "Digestive System Disorders" OR "Nervous System Disorders" TI and AB: “chronic illness” OR “chronic pain” OR “diabetes mellitus” OR “chronic fatigue syndrome” OR “multiple sclerosis” OR “back pain” OR asthma OR “cancer” OR copd OR disease* OR disorder* OR disabled OR diagnosis OR impairment

#2 DE: "Organizational Climate" OR "Working Conditions" OR "Employer Attitudes" OR "Management Personnel" OR "Human Resource Management" OR "Case Management" TI and AB: "organi?ational culture" OR "organi?ational policy" OR "organizational support" OR "work environment" OR workplace OR employer* OR supervisor* OR "work accommodation" OR "worksite" OR "Human Resource Manage*" OR "case manage*"

#3 De: "Reemployment" OR "Vocational Rehabilitation" OR "Employee Absenteeism" OR "Employee Leave Benefits" OR "Retirement" TI and AB: OR “return to work” OR “vocational rehabilitation” OR absenteeism OR “sick leave” OR presenteeism OR “back

to work" OR "continuing work" OR "work ability" OR "employment outcome*" OR "work participation" OR "work engagement" OR "job retention" OR "early retirement" OR "labor force exit" OR "job exit" OR "work absence" OR "work disability" OR "employment outcome" OR "work productivity" OR "labo?r participation" OR "labo?r supply" OR "wage"

Search strategy Econlit

#1 TI and AB: "chronic illness" OR "chronic pain" OR "diabetes mellitus" OR "chronic fatigue syndrome" OR "multiple sclerosis" OR "back pain" OR asthma OR "cancer" OR copd OR disease* OR disorder* OR disabled OR diagnosis OR impairment

#2 TI and AB: "organi?ational culture" OR "organi?ational policy" OR "organizational support" OR "work environment" OR workplace OR employer* OR supervisor* OR "work accommodation" OR "worksite" OR "Human Resource Manage*" OR "case manage*"

#3 TI and AB: OR "return to work" OR "vocational rehabilitation" OR absenteeism OR "sick leave" OR presenteeism OR "back to work" OR "continuing work" OR "work ability" OR "employment outcome*" OR "work participation" OR "work engagement" OR "job retention" OR "early retirement" OR "labor force exit" OR "job exit" OR "work absence" OR "work disability" OR employment outcome OR work productivity OR labo?r participation OR labo?r supply OR wage

Chapter 3

Employer barriers to offer accommodated work for workers with disabilities

This is an extended and translated version: Jansen, J., van Ooijen, R., Oude Mulders, J., Brouwer, S. Employer barriers to offer accommodated work for workers with disabilities. [In Dutch: "Vinden van passend werk bij een arbeidsbeperking is voor veel bedrijven lastig]

Economisch Statistische Berichten 2021; 106(4798), 276-278.

Abstract

Background

Employers are expected to play an active role in the return to work of workers with disabilities and promoting their work participation. However, not every employer succeeds in doing this. The aim of the study was to explore which employer characteristics are related to offer accommodated work for workers with disabilities.

Method

A cross-sectional survey study that aimed to provide more insight into the perception of the employer regarding opportunities for accommodated work for workers with disabilities. Data collection took place as part of a large-scale questionnaire survey, "Remaining longer at work in a flexible labour market", held among employers. A total of 791 organizations from a sample of 5000 organizations (with at least 10 employees each) took part in the survey. Based on several exclusion criteria, we included 289 employers in the analysis.

Results

Employers experience fewer opportunities of accommodated work for lower educated workers compared to higher educated workers. Moreover, employers often perceive barriers to offer accommodated work for people with disabilities due to the type of work, in particular in smaller organizations, organizations in the private sector, organizations with few jobs for the lower educated, and organizations with many flex workers.

Conclusion

The findings of this study show that employers perceive barriers in accommodating lower educated workers and workers with mental health problems because of the type of work within the organization. Particularly in smaller organizations, organizations in the private sector, organizations with few jobs available for the lower educated, and organisations with many flexible workers, it is problematic to find appropriate work for lower educated people with disabilities. This may indicate that work retention for these people is determined not only by the willingness of employers, but also by the limited potential of some organizations to offer new or adapted functions.

Background

Employers are expected to play an active role in reintegrating and promoting work participation of workers with disabilities. They are stimulated to accommodate or adapt job tasks for those with disabilities, and thereby support return-to-work (RTW) and sustainable work participation [1]. This is warranted because several demographic trends, including an ageing population facing more (chronic) diseases and a tendency among the older workforce to leave the labour market due to disabilities, have resulted in growing governmental spending on disability insurance and health care costs [2]. Financial incentives encourage employers to keep workers with a work disability employed, either within their own organization or with another employer [3]. However, not all employers succeed in this. Up to date, work participation by people who have been granted a long-term disability benefit remains low, at about 47 percent [4]. Regarding possible job retention by a worker with a disability, substantial differences exist between employers. For example, the probability of job retention after the WIA assessment is higher in the public sector than in the private sector, and larger organizations often perform better than smaller organizations [5]. The aim of this study was to examine to what extent different types of employers see opportunities for accommodated work.

Method

Sample and procedure

Data collection took place as part of a large-scale questionnaire survey, "Remaining longer at work in a flexible labour market", held among employers from July to November, 2019. A total of 791 organizations from a sample of 5000 organizations (with at least 10 employees each) filled in the survey, which could be completed either online or by returning a hard-copy questionnaire. A further two reminders were sent, the first one around three weeks after the first invite and the second one two or three months after the first invite. The response rate of 16 percent falls within the normal range for such large-scale employer surveys [6]. The response rates of the organizations showed no major differences across sectors or in terms of the number of employees. For the analysis we selected employers who indicated that their organization regularly hired workers with partial or temporary disabilities (46 percent of respondents). Further, we focused on employers who indicated in the questionnaire whether or not they were 'opting-out': i.e., responsible for paying WGA benefits and costs of reintegration themselves. Finally, we excluded observations with missing values. In the end we included 289 employers in the analysis.

Measures

The survey “Remaining longer at work in a flexible labour market” included various questions about (1) the organization, (2) personnel in the organization, (3) ageing workforce, (4) human resource management, (5) work disability, (6) flex work, and (7) personal characteristics of participants.

Dependent variables

5In this study we used three questions from the work disability section in the questionnaire. We asked employers three questions about opportunities and barriers to accommodate workers with disabilities with suitable work:

1. To what extent can your organization offer accommodated work to the following groups of workers: (1) lower educated with physical health problems, (2) lower educated with mental health problems, (3) higher educated with physical health problems and (4) higher educated with mental health problems?
2. To what extent do the following barriers affect the employment of workers with a partial work disability: (1) the job type within the organization, (2) the expected costs of support, (3) financial risks from productivity loss, (4) the additional efforts that it requires from the organization?
3. Which activities does your organization usually take for people with partial disability who can no longer fully perform their "current" job: (1) accommodating the job function, (2) searching within the organization for different job function, (3) providing support to find a suitable job function at another employer, (4) providing training and/or support?

Question 1 and 2 had four response options: (1) none, (2) to a small degree, (3) to a reasonable degree, (4) to a high degree. Question 3 also had four response options: (1) never, (2) almost never, (3) occasionally and (4) regularly.

Independent variables

In the analyses, we distinguished between different types of employers in terms of sector, company size, and organizational characteristics (division male/female, age distribution, education level). The variables were measured the following:

The type of sector was measured with the question “to which industry does your organization belong?” and was categorized in 18 different sectors, divided in private and public. Company size was measured by asking about the number of workers in the organization, which was then recoded into two categories (1-250, >250). The division of male/female workers was measured by asking about the percentage of female workers, data about education level was collected by asking about the percentage of higher educated workers in the organization and age distribution was measured by asking about

the percentage of workers over 50 years old. The variables human capital and social capital were based on four questions with four response categories each, according to the definitions of Subramaniam and Youndt [7]. Specifically, human capital measured the competencies, knowledge, social and personal skills of the workforce. Social capital measured the degree of cooperation, social relationships and networks. Human capital was measured by four items answering "our employees (1) are considered the best in the occupation, (2) are creative and smart, (3) are experts in their job or function, (4) develop new ideas and knowledge". Social capital was measured by four items answering "our employees (1) are skilled in collaborating in problem solving, (2) share information and learn from each other, (3) exchange ideas with people from other divisions of the organization, (4) cooperate closely with clients, suppliers or others in problem solving". Both questions had five response options: strongly disagree, disagree, neither disagree/ nor agree, agree, strongly agree.

Statistical analyses

Quantitative data were analysed using Stata. Descriptive statistics (e.g., mean, SD) were used to describe the study sample. For the descriptive analysis we used a weighting factor to correct for stratified sampling by sector and employer size, with large organizations and those in the public sector being oversampled, while small organizations and those in the services industry were under-sampled. As such, the (unweighted) sample is not fully representative for the total population of Dutch organizations. The coefficients corresponding to % higher educated and % flexible contract were multiplied by 100. In the analyses we adjusted for % female, % older than 50, % managerial, % part-time, firm size and sector. To investigate how the three questions (dependent variables) are related to the different employer characteristics (independent variables), we calculated a standardized sum score of each of the three questions. Using multiple regression analysis, we analysed how opportunities and barriers to suitable work were related to various employer characteristics.

Results

Sample characteristics

Table 1 outlines the descriptive statistics for the variables studied here. Many of the firms had more than 250 workers (mean: 0.60) and have opted-out (mean: 0.69). Of the employees employed at the company 38% were higher educated, 17% had a flexible contract, 43% are female and 40% are aged 50 years or older.

Table 1. Descriptive statistics of employer characteristics

Employer characteristics	Mean	Standard deviation
Organizational Characteristics		
Public sector	0.44	0.50
Employees >250	0.60	0.49
'Opting-out'	0.69	0.47
Staff composition		
% higher educated	38.2	26.9
% flexible contract	17.4	14.6
% part-time	43.4	29.4
% managerial position	9.5	6.9
% women	43.1	27.8
% over 50 years	39.6	15.0
Human capital (1-4)	2.5	0.62
Social capital (1-4)	2.3	0.70

Descriptive findings

Employers indicate that they have more possibilities to adapt functions for higher educated than for lower educated people: about 53 percent of the organizations have a reasonable or high degree of possibilities for highly educated people with physical disabilities (Figure 1). For the higher educated with mental disabilities this percentage is lower (41%). For the lower educated (with both physical and mental disabilities) less than a third (27 – 29%) of the organizations were able to offer suitable work. In fact, one out of three organizations had no possibilities for the lower educated with mental disabilities, compared to one out of five organizations for the higher educated.

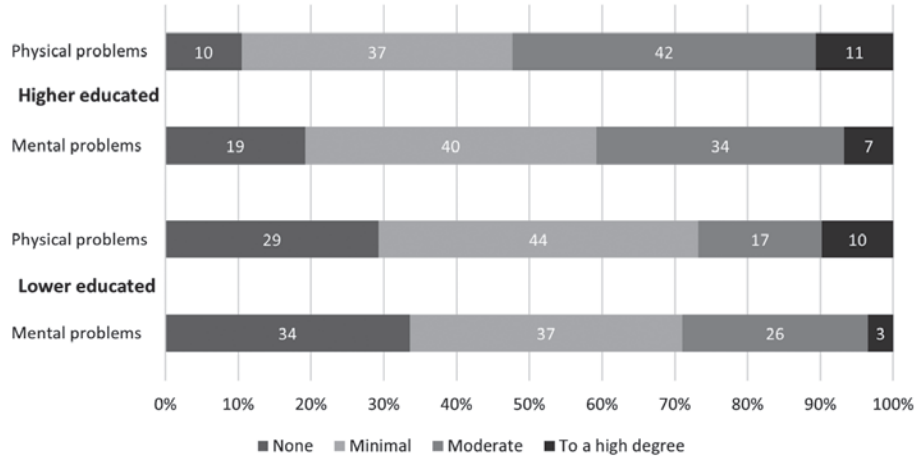

Figure 1. Response distribution Question 1 of the survey: *"To what extent can your organization offer accommodated work to the following groups of workers?"*

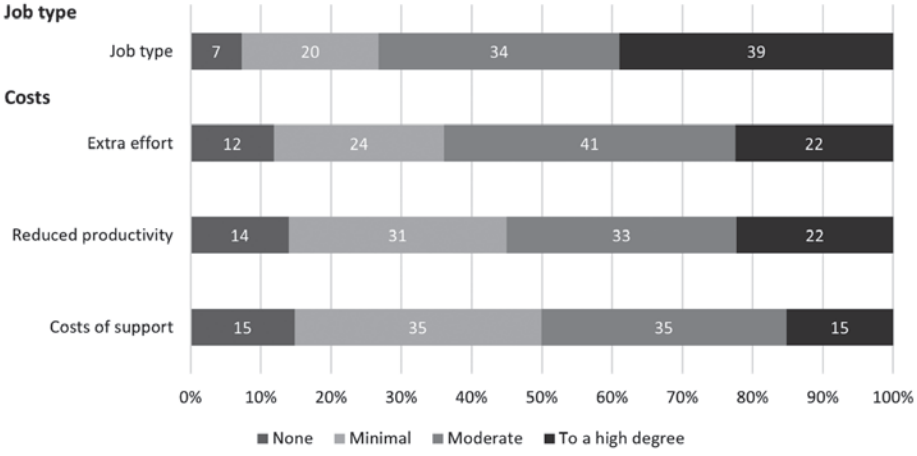

Figure 2. Response distribution on Question 2 of the survey: *"To what extent do the following barriers affect whether workers with a partial work disability remain employed?"*

In particular, the job type within the organization can be a barrier from remaining employed for people with work disabilities, whereas the costs of support, effort, or loss in productivity are regarded as less of a hindrance (Figure 2). About 39 percent of employers indicate that the type of work is a substantial barrier, whereas for 22 percent the need to make an extra effort or loss of productivity are obstacles.

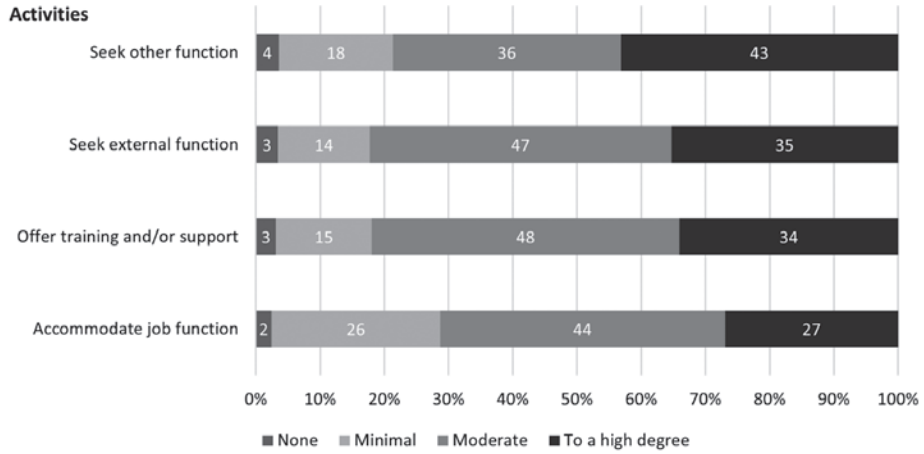

Figure 3. Response distribution of Question 3 of the survey: *"Which activities does your organization usually take for people with partial disability who can no longer fully perform their "current" job?"*

Looking for another function within the current organization is the most commonly observed procedure: this applies by and large to 43% of employers. Also, seeking an external function or offering training or support often occurs in the great majority of organizations. Adapting a function to make it more suitable occurs much less frequently (Figure 3). This reinforces the impression that finding accommodated work within a person's own function is difficult in cases of partial work disability. About 15% of the organizations indicate that they take little or no action to do this (not presented in figure).

Multivariate analyses

Table 2 shows the employer characteristics related to opportunities for accommodated work for workers with disabilities. For the lower educated workers more opportunities for accommodated work are found in the public sector (B: 0.38, $p<0.05$), in larger organizations (B: 0.27, $p<0.05$), and in organizations with a higher percentage of lower educated personnel (B: -0.78, $p<0.05$) or with fewer flex workers (B: -1.16, $p<0.05$).

When differentiating between workers with physical or mental disabilities, larger organizations appear to offer more opportunities for accommodated work to both lower and higher educated workers with mental problems than smaller organizations do; for physical problems the size of the organization makes no difference (not presented separately in table).

When considering the costs of support, effort, or loss of productivity, it is found that employers in the public sector experience financial costs as less of an obstacle, although the difference is insignificant on a five-percent-level. At the same time, organizations with fewer financial incentives to reintegrate workers (opting out (B: -0.25, p<0.05) and organizations with more flex workers (B: 0.99, p<0.05) do more often experience the costs of reintegration as an obstacle. A reported barrier for all organizations is that the type of work itself limits possibilities for adaptations to keep the workers with disabilities employed although just insignificant. Regarding the four activities employers usually take to accommodate the job function, provide a different job function within the organization, support to find a job function at another employer, and providing training/support, it appears that employers in the public sector (B: 0.38, p<0.05), large organizations (B: 0.24, p<0.05), and firms that have opted-out (although insignificant), have a larger range of activities to keep workers with disabilities employed. In organizations with more flexible workers fewer activities are taken (B: -1.07, p<0.05). Moreover, an organization's social capital (working together and networking) has been found to be significantly associated with the activities usually taken (B: 0.23, p<0.05).

Table 2. Multiple linear regression analysis of association between employer characteristics and possibilities to offer accommodated work; barriers, and measures taken

	Possibilities for accommodated work		**Barriers**		**Activities**
	Lower educated (B)	Higher educated (B)	Costs (B)	Type of work (B)	(B)
Public sector	0.38**	0.10	-0.33*	-0.07	0.38*
	(0.03;0.72)	(-0.26;0.45)	(-0.68;0.02)	(-0.44;0.29)	0.04;0.71)
Employees >250	0,27*	0.40*	-0.17	-0.08	0.24*
	(0.04;0.51)	(0.15;0.64)	(-0.41;0.07)	(-0.33;0.17)	(0.01;0.47)
Opted-out	-0.19	-0.03	-0.25*	0.01	0.23*
	(-0.43;0.06)	(-0.28;0.22)	(-0.50;0.01)	(-0.25;0.26)	(-0.00;0.47)
% Higher educated	-0.78*	-0.06	-0.07	-0.12	-0.17
	(-1.28;-0.29)	(-0.57;0.45)	(-0.58;0.43)	(-0.64;0.40)	(-0.65;0.31)
% Flexible contract	-1.16*	-0.60	0.99*	0.21	-1.07*
	(-2.00;-0.34)	(-1.44;0.25)	(0.15;1.83)	(-0.65;1.08)	(-1.90;-0.27)
Human capital	0.05	0.09	0.10	0.04	0.00
	(-0.16;0.26)	(-0.13;0.30)	(-0.11;0.32)	(-0.18;0.26)	(-0.20;0.21)
Social capital	0.09	-0.13	-0.11	-0.08	0.23*
	(-0.09;0.26)	(-0.31;0.06)	(-0.29;0.06)	(-0.26;0.11)	(0.06;0.41)
Constant	0.37	0.14	0.11	-0.10	-0.67
	(-0.34;1.08)	(-0.59;0.87)	(-0.61;0.83)	(-0.85;0.65)	(-1.36;0.02)
R-squared	0.115	0.066	0.088	0.022	0.160

Note: *Significant at the five percent levels. All models also control for the variables: % part-time, % managerial position, % women, and % over 50 years.

Discussion

Employers often find it difficult to organise accommodated work for people with disabilities because of the type of work within the organization. This applies especially to the lower educated, who are less employable in various functions. Particularly in smaller organizations, organizations in the private sector, organizations with few jobs for the lower educated, and organizations with many flex workers, it is problematic to find appropriate work for lower educated people with disabilities. This suggests that work retention for these people is determined not only by the willingness of employers, but also by the limited potential of some organizations to offer new or adapted functions [8].

Moreover, if employers bear less responsibility for partial work disability (such as organizations with numerous flex workers and opting out) they are less willing to invest in re-integration because of the costs. This may be perceived as striking, considering that since the Sickness Benefits Act was modernized in 2013, a flexible worker with a work disability has a right to receive help with re-integration as long as his contract lasts. A possible explanation is that organizations with many flexible workers are more concerned about the personnel costs they face in cases of disability (see also [9]). This raises the question whether, despite the modernized Sickness Benefits Act, the financial incentives for employers to re-integrate workers are sufficiently strong for flexible workers.

With the information provided here, policymakers can more specifically stimulate and support employers to invest in finding accommodated work for workers with disabilities. Policymakers can encourage organizations with fewer possibilities to look sooner for suitable alternatives within and outside the organization. In addition, financial incentives for re-integration can help to encourage employers to facilitate work accommodations for workers with disabilities. Policymakers can also encourage organisations to form partnerships: large and small employers can be brought together to increase the potential for suitable work. Also, early retraining can promote finding appropriate work, thus preventing sick workers with disabilities from sitting at home unnecessarily long and becoming increasingly distant from work.

Conclusion

The findings of this study show that employers perceive barriers in accommodating lower educated workers and workers with mental health problems because of the type of work within the organization. Particularly in smaller organizations, organizations in the private sector, organizations with few jobs for the lower educated, and organizations with many flexible workers, it is problematic to find appropriate work for lower educated people with disabilities. This may indicate that work retention for these people is determined not only by the willingness of employers to arrange work adaptations, but also by the limited potential of some organizations in doing so.

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Chapter 4

Exploring employer perspectives on their supportive role in accommodating workers with disabilities to promote sustainable return to work: a qualitative study

Published as: Jansen, J., Boot, C.R.L., Alma, M.A., & Brouwer, S. Exploring Employer Perspectives on Their Supportive Role in Accommodating Workers with Disabilities to Promote Sustainable RTW: A Qualitative Study.

Journal of Occupational Rehabilitation, 2022, 32(1): 1-12.

Abstract

Purpose

Employers play an important role in facilitating sustainable return to work (RTW) by workers with disabilities. The aim of this qualitative study was to explore how employers who were successful in retaining workers with disabilities at work fulfilled their supportive role, and which facilitators were essential to support these workers throughout the RTW process.

Methods

We conducted a semi-structured interview study among 27 employers who had experience in retaining workers with disabilities within their organization. We explored the different phases of RTW, from the onset of sick leave until the period, after 2-years of sick-leave, and when they can apply for disability benefit. We analysed data by means of thematic analysis.

Results

We identified three types of employer support: (1) instrumental (offering work accommodations), (2) emotional (encouragement, empathy, understanding) and (3) informational (providing information, setting boundaries). We identified three facilitators of employer support (at organizational and supervisor levels): (1) good collaboration, including (in)formal contact and (in)formal networks; (2) employer characteristics, including supportive organizational culture and leadership skills; and (3) worker characteristics, including flexibility and self-control.

Conclusions

Employers described three different possible types of support for the worker with disabilities: instrumental, emotional, and informational. The type and intensity of employer support varies during the different phases, which is a finding that should be further investigated. Good collaboration and flexibility of both employer and worker were reported as facilitators of optimal supervisor/worker interaction during the RTW process, which may show that sick-listed workers and their supervisors have a joint responsibility for the RTW process. More insight is needed on how this supervisor/worker interaction develops during the RTW process.

Introduction

Over recent decades several OECD countries have reformed their disability programs to foster labour market integration of people confronted with challenges to staying or re-entering the workforce due to illness or disabilities [1]. These reforms focus primarily on reintegrating workers with disabilities into employment, recognizing that many have only partially reduced work capacity and can therefore continue working if adequately supported by their employer [1–3]. In the Netherlands, the Dutch Gatekeeper Improvement Act describes obligatory procedures for workers with physical or mental health disabilities and employers to follow during the 2 years after sick leave. Workers on long-term sick leave (> 2 years) can apply for disability benefits and will be assessed by an insurance physician of the Social Security Institute. In this study, we focus on workers assessed as having residual work capacities receiving partial disability benefits. Since these reforms the employment rates of people with disabilities have gradually increased [1,4].This may suggest that employment outcomes of people with disabilities are affected not only by their health conditions but also by their work environment [5].

There is growing understanding in research and practice that employers play an important supportive role in preventing early labour market exit by workers with disabilities. This support can be offered at organizational and individual level within the organisation [6]. Both the employers' disability management policies and practices and the social interaction between the individual supervisor and the worker may influence job retention [7]. An employer can support workers by offering workplace accommodations that facilitate quicker return to work [8]. In addition, offering emotional support can create a good relationship between the supervisor and worker during the RTW-process by sustaining cohesion and communication and by responding to the needs of the worker [9]. A study on the perspective of the workers showed that workers perceive a lack of emotional support as a barrier to the RTW outcomes [10].

Besides considering the different levels of employer support (organizational and supervisory), RTW should also be considered as a process consisting of different RTW phases, especially when focusing on the role of employer support among workers who were sick listed for a long-time [11]. Employer support can be conceptualized as both the employers' disability management policies and practices and the social interaction between employers and employees which may influence work participation of workers with disabilities. Employers' involvement during each of the RTW phases of sick-leave, RTW and post-RTW, can facilitate workers' RTW outcomes [9], but the type and intensity of support in different phases may vary [12]. During sick-leave, the supervisor and the worker can communicate frequently about the need for work accommodations and ways to accelerate RTW [13]. During RTW, employers can implement work accommodations

that help the worker to continue working [14]. It is important that employers coordinate specific actions aimed at facilitating sustainable RTW [15]. During the post-RTW phase, communication with the worker is vital in the process towards sustainable employability [16].

Despite ample evidence of the importance of employer support in the RTW process of workers with disabilities, little is understood about how employers deal in practice with this role in the RTW process, and which facilitators of their support are most important for sustainable RTW. While previous qualitative studies have indicated that employer support is relevant to address the diverse needs of these workers, the majority of studies have focused on this role of the employer in RTW following short-term sick leave, but not following long-term sick leave [9,17]. In addition, most interview studies explored employer support only from the perspective of the workers [17–19], instead of focusing on the perspective of employers. Although a few studies did include the employers' perspective on the RTW process [16,20], these studies focused only on the long-term sickness absence phase, and did not include all phases of the RTW process. Other studies of employer perspectives mainly focused on barriers and facilitators of workers who were unable to continue working [19], instead of focusing on cases where workers were able to stay in the labour market. Most of these studies focused on the challenges employers perceive, but not on the offered support that is relevant for work participation. We can learn from employers who succeeded in facilitating RTW and continued employment for workers with disabilities, to see which elements are relevant. The innovation of this study is that we focus on the perspective of the employer on their supportive role during the long-term RTW process.

Against this background, the aim of this qualitative study was to explore how employers who succeeded in retaining workers with physical or mental disabilities at work fulfilled their supportive role, the kind of support they offered, and which facilitators of employer support are essential to accommodate workers with disabilities throughout the RTW process.

Methods

Design

We conducted individual semi-structured interviews with employers' representatives (i.e., supervisors, HR managers, and case managers).

Ethical Considerations

We received ethical approval from the Medical Ethical Review Board (METc) of the University Medical Center Groningen. Prior to beginning semi-structured interviews with employers, we obtained their written informed consent. All employers approved audiotaping of the interviews, and their use for scientific research after anonymization.

Institutional Setting

In the Netherlands, the employer is the most important stakeholder in the RTW process, one with a substantial financial and practical responsibility [21]. According to the Dutch Gatekeeper Improvement Act, in cases of sickness absence, both the employer and worker are responsible for the recovery and return to work of the (long-term) sick-listed worker [22]. This legislation describes obligatory procedures for workers and employers to follow. After 6–8 weeks of sick leave, the worker and employer need to develop a RTW plan [23]. After 2 years of sick leave, insurance physicians working at the Social Security Institute for Worker Benefit Schemes (UWV) assess workers for disability benefits [24]. Workers assessed as having residual work capacities receive partial disability benefits [25]. Employers may keep these workers in the workplace but are also allowed to terminate their contracts. Dutch regulations, with a clear focus on activation of workers with disabilities, guarantee employer involvement in RTW [26]. This makes the Dutch context interesting for research into employers' perspectives on sustainable RTW by workers with disabilities.

Selection of Employers

We used purposive sampling to recruit employers from organizations in different sectors and of different sizes (small, medium or large). We selected employers who, since 2017, had experience in retaining one or more workers with disabilities within their own organization. Disabilities was defined as having physical or mental health problems affecting work capacities. Workers with disabilities were defined as workers who had been assessed by the insurance physicians, had residual work capacities, and were receiving partial disability benefits due to long-term mental or physical disabilities. We chose 2017 because the RTW trajectory lasts 2 years in the Netherlands. In the first round of selection, the Social Security Institute for Employee Benefit Schemes (UWV) sent information letters to 200 employers. These letters included information on the aim of the study, the interview procedure, the inclusion criteria, and how to sign up (registration form, or an e-mail or phone call to the researcher). After registration, employer representatives were screened for study eligibility by answering several questions, using Qualtrics, mail, or telephone. Inclusion criteria were: (1) understanding of the Dutch language, and (2) having a job function within an organization experienced in successfully supporting long-term sick-listed workers during all identified RTW phases. Employer representatives could be HR managers, case managers, or supervisors, as their roles could differ per company. In the

first round, 30 employers indicated their willingness to participate in an interview. Because most respondents represented medium and larger companies, we conducted a second round of sampling; in this round, the UWV sent letters to 100 employers with smaller companies, who had since 2017 retained only one worker with residual work capacities.

Procedure

In-depth interviews with the employer representatives were conducted in 2019, either face-to-face or by telephone. JJ conducted all interviews, and had not previously met the employers in person. The employers had no connection with the UMCG. Employers were asked to prepare information about at least one case of a worker with disabilities who successfully (partially) stayed at work. Before being interviewed, employers filled in a small questionnaire to provide background information about: (1) their sector of employment, (2) their function, (3) the date of disability benefit assessment in the case they had prepared, (4) the type of disability of the case, (5) their number of years of experience in this job, (6) their company size, and (7) whether the employer was insured for sick leave costs (yes/no). The interview guide was structured according to the different phases of the RTW trajectory; questions were about what actions employers had taken at the onset of their worker's sick leave, and what happened during the period of long-term sick leave (6–8 weeks to 2 years) as well as during the period after 2 years of sick-leave, when the worker applied for disability benefits. For each phase questions started with, "What did you do?"; follow-up questions included: "How did you feel about it?", "How did the worker with disabilities feel about it?" and "How was the interaction between you and the worker?" The interviews lasted 60–120 min.

Analyses

Interviews were audio-recorded, transcribed verbatim and entered in Atlas.ti 8.4 for analysis. We used qualitative thematic analysis to guide the research analyses [27]. We conducted thematic analyses by developing a systematic coding process to identify themes and patterns in the data. The thematic coding scheme was based on themes retrieved from a previous systematic review conducted by our team [28]; from an article on the "Reasonable Accommodation Factor Survey" [29]; and on additional codes retrieved from the transcripts. Memos made during and directly after the interviews helped to identify the saturation point of the themes. In addition to thematic coding, we used open coding. After this, we revised the coding scheme for clarification and added new codes, clustering thematically similar codes into broader codes. JJ coded all transcripts. To establish credibility, first a co-researcher (NS) independently coded three transcripts and in addition a researcher specialized in qualitative research (MA) also independently coded three interview transcriptions and discussed and compared the code scheme with JJ. This led to a revised code scheme, which was then shared with and controlled by members

of the research team (CB, SB). Together with the research team, we made the final decisions regarding the clustering of the coding in themes. After clustering the codes into themes, we analysed relationships between themes, and differences within themes, like opposite perspectives. In addition, we clustered types of employer support per RTW phase.

Results

Sample Describing

Employer representatives included in the interviews were case managers (10), HR managers and P&O advisors (9), supervisors (6), and reintegration specialists within the organization (2), 16 of whom were employed in the public sector and 11 in the private sector. The employer representatives were all from different organizations and employed in different regions in the Netherlands. Of the employer representatives, ten were male and 17 were female. In addition, six had one to five years of work experience, seven had six to ten years of experience, and 14 had ten or more years of experience (Table 1). Each employer reported on one or more cases of workers with disabilities, most of whom had long-term physical disabilities (32), and some had mental health problems (6).

Table 1. Characteristics of study participants (n = 27) and the selected cases

Employer characteristics	Number
Gender	
Male	10
Female	17
Position	
Case manager	10
HR manager	4
Supervisor	6
P&O advisor	5
Other	2
Job experience	
1-5 years	6
6-10 years	7
>10 years	14
Sector of employment	
Health sector	9
Education	6
Finances	2
ICT consultancy	2
Government	1

Employer characteristics	Number
Industry	5
Other	1
Company size	
10-99	1
100-249	3
250- 499	1
500-999	4
1000 >	12
Worker characteristics	
Disability type	
Physical	32
Mental	6
Gender	
Male	15
Female	18
Missing information	3

Themes and Subthemes

Analysis of the supportive role of employers resulted in two categories: types of support and facilitators of support, with several themes and subthemes related to each overarching theme. Figure 1 presents a visualization of the themes and subthemes. To illustrate the findings we added representative quotes from the employer representatives, translated by a native English speaker.

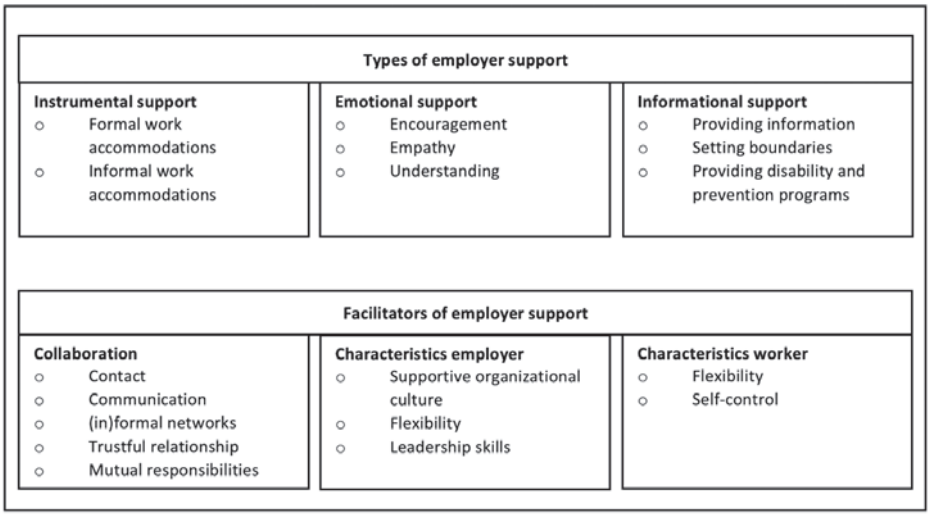

Figure 1. Overview of identified themes and subthemes of types of employer support and facilitators

Types of Support

Participants reported three different types of support which they could offer to the worker with disabilities: instrumental support, emotional support and informational support.

Many employers stated the importance of offering work accommodation as part of **instrumental support**. Work accommodations can be arranged formally or informally. Formal work accommodations include changing working hours, changing work tasks, and allowing working from home. Some employers reported that this type of support was easily implemented, especially when they perceived no barriers from the workplace and colleagues against providing work accommodations. Conversely, other employers noted that it was difficult to provide formal work accommodations, because arranging and implementing effective and suitable work accommodations takes a lot of time and effort, and also depends on the availability of job functions within the organizations.

> *R12: "…whereas in an office you can still easily just work 3.5 hours. In a production line we work in blocks until breaktime. I can easily call in an agency worker for half a day, for example, but I can't call in an agency worker for just 1.5 hours a day. In terms of planning, in a production environment you are less flexible with the part-time arrangements you can offer employees. So there you have to discuss a bit more, also with the company doctor, as to what fits in terms of a part-time model." [HR manager, industry]*

Some employers also expressed that changing work tasks was not a structural solution, as within their organization it was impossible for them to create a new function. Therefore, some employers mentioned that providing a new function to a worker with disabilities is just dependent on luck:

> *R8 "Yes, sometimes it's just a matter of timing. You know, at the moment a person can no longer do his job, then he becomes a candidate for reintegration. That means that he has precedence over others for suitable job openings that become available." [HR manager, health care].*

Employers often considered informal work accommodations helpful, as when co-workers could take over tasks for the sick colleague and create a (temporarily) new (previously non-existing) function.

> *R15: "Look, if you, if more people are doing the same job, then you can arrange with colleagues, like, take over for each other when one is sick. And if that doesn't give any problems, then you get very nice cases." [case-manager, health care]. However, when informal work accommodations became structural, some*

employers perceived negative effects, such as stress among co-workers. I10: "Then I kind of wonder, what if you limit the flexibility [and] continuity of … the different workstations that we have to distribute our employees over? In which case the heavy workstations, the activities that definitely have to be done, end up with the more healthy people. And in itself that's not bad for a while, but if that continues, then in my experience you end up in a negative spiral. Because then you're going to overburden the healthy people, and they'll drop out." [supervisor, industry].

Besides instrumental support, many employers mentioned the importance of **emotional support**. They reflected that their encouragement of workers in the RTW process, by showing empathy and understanding and taking the other seriously, could help these workers to succeed in the RTW process.

R11: "I find involvement with people, knowing about people and showing interest in them, and thinking with them and being much more encouraging and positive, works better than putting them on the spot and being critical. I think that's just the crux of how you should do things. And then a lot of things just go well, and where possible you look together for a solution. And usually there is one." [HR manager, education]

However, many employers emphasized that in some RTW trajectories it is necessary to guard against going along with the needs and wishes of the workers, because this can sometimes impede their RTW and recovery. Many expressed the need to be clear about expectations.

The third type of support, **informational support**, usually had to do with providing information about laws and regulations and available disability and prevention interventions, and with providing support for the disability assessment. Disclosure about these themes revealed possibilities for work accommodation.

R12: "…and sometimes they have questions that I can't answer, either. But then they've said it, then it's out, you know, then it's out of their head and then maybe I can refer them; I can say well, you'd better call UWV, or let's, shall we, call the UWV together…. Then they have the idea that they have a kind of supporter, so to speak, and that if they have doubts about something or still have some worries, they can express it and we can just talk about it together. And you really mustn't imagine that we spend hours and hours on this; I mean, it all sounds very dramatic and spectacular, but it's not. Sometimes it's just a quarter or half an hour of coffee together, like hey, if you have any questions about it… You know,

let's take this step now. I'll also confirm it in a letter. If you have any questions about it, call me or just drop by." [HR manager, industry]

Employers regarded informational support as one of their responsibilities, especially because not every worker with disabilities is able to receive and understand the information him- or herself, and often RTW is complicated. Therefore, employers expressed the value of spending time to explain, for example, the required roles of the employer and the worker, as well as possible interventions and work accommodations.

R13: "And then while you're talking about it, you realize that, yes, as long as I'm not sick, I'm not going to read all that. So only when someone becomes really long-term sick, yes, then they start scratching their heads and thinking, oh well, problem analysis and action plan … Only then do people think, oh yes… I also have to deal with that. And I don't know if it's because most of the people I work with come from a production environment. But, yes, also on other levels. Then I notice that, well, it's quite a lot of paperwork. And I think it's best to just take people through it step by step." [case manager, industry]

Employers also mentioned that informational support includes setting boundaries for workers, such as explaining that they may be too ambitious in trying to (fully) return to work.

R17:"… Look, and the best thing is if they as supervisors know someone well and know what works with them, that is, that one person you have to stimulate a bit and the other you have to slow down; to the one you have to give space and respect their autonomy, and to the other you have to give more guidance." [P&O-advisor, health care].

Differences in Support Between the Phases

Formal instrumental support was relevant in all RTW phases. Informal support was mostly relevant in the first phase, but became more structural in the second phase. Emotional support was reported as relevant in all phases, but during follow-up its focus changed: in the first phase of sick-leave, support focused on getting a grip on the situation, followed by a focus on understanding the needs of the workers during the second phase of RTW. Post-RTW, after the disability benefit assessment, emotional support was about staying engaged with the worker in order to respond to possible changes in his needs. Informational support was mentioned as particularly relevant during the first two phases of RTW. Such support changes from providing information about RTW and the plans to be undertaken, towards providing information and support for the disability assessment.

Facilitators of Employer Support

Collaboration

To provide the different types of support, most of the employers mentioned good collaboration as an important aspect, relevant to all phases of the RTW process. The analyses revealed that these facilitators are overarching factors of support and are relevant in all phases of the RTW process. Four subthemes of collaboration were identified: (in)formal contact, communication, trusting relationships, and mutual responsibilities.

Having **(in)formal contacts** was reported as an important facilitator for good collaboration. Contact moments can be organized formally, as prescribed by law. Such formal contacts are important for the official process of RTW and for accommodating work to bring about sustainable RTW. However, employers also expressed the importance of staying in touch with the sick-listed worker in the time between the formal contact moments.

> *R18: "And nothing happens, while in the meantime the employee is recovering and can do more, yes, then you encourage that, and I think that's good for both sides. And then the obstacle becomes a little smaller if you just stay in touch every time." [HR manager, other].*

Open communication characteristically provides clarity about what employers expect from the worker during the trajectory, and about possibilities for work accommodations. Although many employers remarked that it did not always feel good to be clear, they recognized the benefits of open and clear communication. According to the employers such communication helps workers to accept their work disability and adapt their expectations regarding accommodations. Another aspect mentioned in regard to open communication was disclosure. Some employers mentioned the importance of asking critical questions to help workers to be open about their disabilities, their feelings, and their concerns regarding sustainable RTW.

> *R11: "… ask more critical questions, like what do you need to get through this difficult period? Will it help you to stay at home, or would distraction be better for you?" [HR manager, education]*

Such disclosure can help supervisors to devise work accommodations to fit the personal circumstances of the sick-listed worker. Employers also initiated disclosure by asking whether workers wanted to tell their colleagues what was happening and what they needed.

Many employers consider a **trusting relationship** between the supervisor and the worker to be important for good collaboration. A perceived lack of trust complicated efforts to

make agreements, and to create alignment and open communication. Some employers consider trusting relationships with workers to be a part of their organizational culture. Active listening and reflection can also help to build trust and provide clarity about the trajectory and the future. One employer described how it worked when workers trusted her:

> *R12: "And then just say, gosh, I'm really having problems with this now, can you think through it with me, or do you know how this works, that at a certain point they themselves seek contact when they have a question or just want to share something confidential or just tell how they are doing." [HR manager, industry].*

Many employers felt that, to determine the process of the RTW trajectory, the employer and worker have **mutual responsibilities**; these are considered to be another key aspect of collaboration. All employers explained that both employer and worker need to think about possibilities for work accommodations, and take responsibility to fulfil mandatory requirements of the Dutch Gatekeeper Improvement Act. Employers also expressed that workers are responsible to communicate what they need from the employer:

> *R13: "And are there still other things I haven't thought about, uh, that you need? And if there aren't now, yes, let me know later. Because yes, that part is your own responsibility…" [case manager, industry]*

They also mentioned that both employer and worker are responsible for a positive attitude during the trajectory; to make the trajectory easier, both should look for possibilities rather than focusing on the negative aspects of disability and RTW.

> *R14: "Well, I didn't discuss with him what he expected from his employer. We just did what had to be done and later he said he was thankful for that, so that's actually a yes, but okay, his cooperation during the whole process showed that he was very satisfied with it and considered it a good solution. So, because he went along with the solution offered by the employer and didn't act difficult if the schedule wasn't just the way he wanted, and then get annoying, but just collaborated, went along, was cooperative, made an effort where possible, yes. That showed that, of course, that he was showing his gratitude." [case manager, education].*

Employer Characteristics

Along with support and collaboration, employers mentioned organizational culture, leadership skills and flexibility on the part of employers, as well as (in)formal networks, to be important employer characteristics influencing the RTW trajectory of workers with

disabilities. The analyses revealed that some of these factors are more relevant at the second and third RTW phase, especially the use of (in)formal networks.

Employers explained that a **supportive organizational culture** plays a role in how they approach the worker with disabilities. They expressed the importance of having a people-oriented approach, to see the worker as a human being instead of only a human resource:

> *R16: "…a culture where primarily one person, or only the result, counts and people ignore the relationship, is disastrous for absenteeism. Yes. That's a huge contributor to absenteeism. So sincere contact, daring to make a difference and stepping outside the box for a short period of time, helps you to get an absent employee back much faster than when you don't dare and don't have the guts to do that." [case manager, finances]*

According to employers, organizational culture consists of the unspoken rules on how employers and workers relate to each other, and expectations about work ethos. Some said that every worker in their organization knew the importance for the organization of open communication and taking care of each other. Moreover, in some organizations in the health sector, but also in ICT, government and education, reputation (status, image) is an important aspect of the organizational culture. The representatives of these organizations mentioned that status ensures that workers really want to continue employment within their own functions in these organizations.

Some employers mentioned that supervisors need **leadership skills** for collaborating with workers with disabilities and professionals: skills like communication, confidence, reflection, and the ability to share their personal experiences. Among helpful leadership skills they included not being afraid to communicate about responsibilities for and barriers to work accommodations. In addition, some employers found it useful to be unafraid to make early decisions about how to approach the trajectory. Many employers expressed the urge to give their best in their support:

> *R19: "Then I'm really a terrier, if things are really unreasonable and unfair. Then I get my teeth into it and then I can be a tough customer. Then I go for it for my employees, to get the very best for them." [supervisor, education]*

A few employers also said that besides having a professional side, they also had a soft side. Some mentioned that their own reflection on the personal circumstances of the worker could influence the trajectory. In addition, some considered it important to consider their own past personal experiences with work disability.

Another important employer characteristic was **flexibility**, reported as valuable to help employers to consider alternative solutions and provide tailor-made approaches, rather than sticking to strict boundaries and time restrictions within trajectories. Tailor-made approaches include deciding to start earlier with mandatory actions, like involving external professionals. Some employers illustrated the importance of flexibility in making individual decisions for workers, rather than focusing on equality for all workers.

> *R9: "Because in some places the pressure to produce is so high, and employees are constantly confronted with production demands that have to be met. Can you be a little flexible in this, and do you dare to make different arrangements with the one than with the other? Or do you treat everyone the same, and do they all have to meet the same production goals?" [HR manager, health care].*

Human capital was reported as another important aspect. Many employers expressed that, although they prefer not to make exceptions for workers who show that they like to work hard and who are valuable to the organization, such an attitude certainly helps. Some employers tend to do more for workers who are more valuable, especially because they have been employed for many years.

> *R12: "Of course you also consider that someone has already worked here for 25/30 years. Highly valued employee, someone you never heard or saw, just a silent force, yes, and then you sit down at the table together, let's just do all we can to keep her here. For sure, let the boss know if you really can't manage it. But from the beginning he has already taken the position of, let's see if we … in any case can keep her for the organization." [HR-manager, industry].*

Many employers mentioned the importance of having their own **formal and informal networks** with other supervisors or HR managers as a facilitator of job retention. Networks can include contacts within the same organization or within other organizations. Particularly when workers are not capable of returning to their own jobs despite the provided work accommodations, it is important to support them to find another job, one better suited to their residual work capacity. Such networks should be established in advance, because it takes time and effort to create a network.

> *R11: "From all kinds of sectors we have employers who regularly sit down together to see what vacancies are available. If we have people working for us who are for some reason no longer suited to their position, maybe they could gain very good experience or even a job with another employer in our network." [HR manager, education].*

Worker Characteristics

Employers considered **flexibility and self-control** on the part of workers as important facilitators of the RTW trajectory. They mentioned the advantage of having workers willing to adapt to changes in the trajectory and accept work accommodations.

> *R9: "Well, in practice we always know how to redeploy people. And whether that works depends a lot, I think, on how flexible the employee is. And whether he has had fairly good training. Some people want to know exactly where they stand. Well, in such a situation you don't know where you stand. That can take a while. We try to offer possibilities, sometimes temporary, but then you still don't have a definite position. The more easily a person deals with this, the sooner he will have a place." [HR manager, health care].*

Many employers appreciated having workers show **self-control** expressing what they need and want. Employers admire this quality because it is convenient for themselves; they do not have to invest time and effort to activate these workers. A few employers explained that they promote workers' self-control by offering training.

> *R17: "Some employees are very good at deciding for themselves what helps them, what they are capable of. They are able to think, what does it mean for my colleagues to have to take over certain tasks in my absence? … That differs a lot per employee and you really want, that's the purpose of the program sustainable deployment but also training and education, that in principle the employee can do this. Because then he remains in charge. But not everyone can manage that." [P&O advisor, health care]*

Some employers also remarked that, because of their character traits and personal circumstances, not all workers are able to show self-control.

> *R20: "Ostrich politics. Trying to deny that you may have something really bad. Trying to hide that. You're ashamed. You don't want to walk around like a loser. You want to be a big girl. Maybe you don't see that so clearly anymore either … So it depends a lot on yourself. Hey, when do you say: hey, I've come to the point that I can't go on? And I need help with that?" [supervisor, finances]*

Some employers expressed that when workers are flexible and show self-control, the role of the employer is much easier because he does not have to work hard to stimulate them.

Discussion

This interview study describes the actual experiences of a wide-range of employers who successfully helped workers with disabilities to stay at work. We focused on employer perspectives on long-term RTW trajectories of workers with both mental and physical work disabilities. We have identified that employers who successfully supported these workers provided formal and informal work accommodations, showed empathy and understanding, and facilitated disclosure and provided information and boundaries. We have also identified that employers experienced several facilitators as helpful during the RTW process: (1) good collaboration, including (in)formal contact, trustful relationships, mutual responsibilities; (2) employer characteristics, including supportive organizational culture, leadership skills, organizational flexibility, and (in)formal networks; and (3) worker characteristics, including flexibility and resilience. In all phases, formal instrumental and emotional support were found to play a role, albeit in different ways.

With our study we explored what kind of employer support is relevant for RTW. This is in line with previous studies that also found the importance of different types of support, which they framed as instrumental, emotional and informational support [9,11,30,31]. These studies, mostly from the perspective of the workers, also found that empathy, trust, guidance are important aspects in the RTW process [11,30]. Our study builds on this knowledge by providing information about barriers and facilitators to provide employer support from an employer perspective. Moreover, we were able to include a 2-year sick leave and RTW process, whereas previous qualitative studies focused on a shorter period [9]. Studies that did focus on the three phases, including sustainable RTW, showed some similar findings regarding concrete actions employers undertake [16,32–34]. For example, our study showed that emotional support is critical throughout the RTW process, similar to a study by [11], but different from a study [36] who found that the emotional support from supervisors is relevant in the RTW-phase and not in the other phases.

In addition, we found that instrumental support and informational support are also critical throughout the RTW process, but also develop over time. For instance, the provision of work accommodations depends on the RTW phase, which is also found by other studies [16,34]. Our study differs in the finding that employers can implement the instrumental support in an informal and formal way. We found that some employers implement informal support, by means of co-workers taking over tasks. In addition, our study showed that besides the concrete actions that are mainly related to the implementation of work accommodations, other factors like collaboration are critical as well.

The importance of providing work accommodations is in line with previous studies. A recent systematic review on the role of the employer in supporting work participation by workers with disabilities, gave moderate to strong evidence of the benefits of work

accommodations like adjusted work schedules, provision of equipment, and modified work activities to help workers to return to work, and to stay employed after the onset of work disability [28]. Informal instrumental support, as by co-workers who are willing to take over work tasks, has been identified as a substantial type of work accommodation, both vital and easy to implement during the first phase of sick leave. This applies particularly in cases when arranging formal work accommodations is hindered by obstacles within the organization, or when work accommodations that fit the needs and skills of the worker are hard to find. However, using informal support as a structural solution can put a burden on healthy co-workers [12,36,37], especially when employers are unaware that co-workers are providing such support because it is often 'behind the scenes' [38]. Such factors may leave less leeway for arranging formal work accommodations, and also negatively affect the well-being of the healthy co-workers.

The importance of offering emotional and informational support was also reported in previous studies. Workers found emotional support by the supervisor to be particularly effective in diminishing their feelings of vulnerability during RTW [39,40]. A supervisor who showed empathy and understanding helped them to adapt better to their new situation. Research on workers with a burn-out also showed that emotional support changed the focus from the pressure of RTW to the recovery that was needed [31]. Informational support includes the role of employers to inform their workers of the rules and legislations related to the RTW process [11]. Most workers do not have advance knowledge about sick leave regulations and disability benefit claim procedures [38]. If individuals do not understand or correctly perceive the incentives and possibilities, they may make suboptimal decisions [41]. Employers can thus play an important role in communicating this information to workers during all phases of the RTW process, including the final phase when the worker needs to submit the necessary documents for the disability claim assessment.

Among the factors facilitating RTW, our study underlines the significance of the interaction between supervisor and worker. To make such collaboration effective, frequent (in)formal contact, trustful relationships, and mutual responsibilities were found to be essential. Skilled supervisors are thus a vital part of employer support during the RTW process [31,42]. Several other studies also emphasized the importance of organizational culture, flexibility, and leadership skills at the employer level [43,44], as well as disability management policies and practices in the workplace [44,45]. Other studies from the perspective of workers also found that communication is an important aspect during RTW. These studies mainly focused on the role of health care providers and showed that meaningful communication between health care providers and employers is important [46]. In addition, a study showed that workers who were successfully accommodated within their organization described the importance of good communication with the supervisor as well [47]. Along with above-mentioned leadership skills like empathy and understanding and effective

communication, to collaborate effectively, employers, and more specifically supervisors, need to have adequate knowledge about the work circumstances of the worker [48]. In our study, along with flexibility, employers also mentioned the importance of resources like networks within and outside the organization as important sources of support for workers with disabilities. Other studies also showed that employers use networks to share knowledge and experiences about diseases and practices [49,50]. However, as yet, no available literature describes how employer networks can be used in RTW processes, such as finding (temporary) jobs within other sections of the organization, or in other organizations. Furthermore, the characteristics and attitudes not only of employers, but also those of workers, were found to influence employer support. We found that workers who showed flexibility and self-control were more likely to receive support from their employers, thereby facilitating the RTW process. Other qualitative studies also mentioned that workers' self-control [51,52], and their ability to express their needs, were facilitators of RTW and staying at work.

Strengths & Limitations

An important strength of the present study is that it explored the support of workers in RTW from the employer's perspective. Moreover, this study is augmented by success stories of employers of workers with disabilities, as we selected employers who had managed to retain one or more of these workers within their organization. Although we focused on success stories we also received information about challenges that employer representatives perceived during the RTW process. However, studies who investigated barriers for RTW also revealed other themes that could be helpful to understand why some workers are able to sustainable RTW and others not. These studies focused on barriers and facilitators of workers who were unable to continue working [19] and revealed themes related to personal characteristics of workers, like the financial situation, job issues but also organizational influences and the role of interpersonal support [53].

Another strength of the study is that we collected information about employer support during different phases of the RTW process. Most previous studies investigated employer support in RTW only over a short period of time, therefore including only a part of the employer's role in the process. Our study followed the role of the employer from the first phase of sick-leave and RTW up to and after the disability claim assessment. We were thus able to provide an overview of employer support during different RTW phases. As we investigated the role of the employer in every phase of RTW, future research could shed more light on these different phases.

In addition, a strength of our research is the heterogeneity of our study sample. We interviewed a variety of employer representatives, supervisor, case managers and HR managers, from small to large organizations in both public and private sectors, from

almost all regions of the Netherlands. The variety in differences in jobs occurred because employer support is organized differently in organizations. After analysing the transcripts, we confirmed that all the different representatives provided the types of support during the RTW process.

However, this heterogeneity had some limitations, one being that the design of this study did not allow us to investigate the differences in the roles of the representatives. In future research it would be interesting to further explore whether the different employer representatives are equally involved at all phases and whether the type of provided support differs. In addition, this study explores the perspectives of employer representatives who are involved in return to work (RTW) planning for workers with disabilities who have been on sick leave. We focused only on the perspective of the employer which could be a limitation of the study. Including the perspectives of other stakeholders such as occupational health physicians and stakeholders outsight the organization such as labour-experts might give a bigger picture of employer support. One limitation of our study is that we did not explore the experiences of dyads of workers and employer representatives in this study. This exploration could have brought more insight into the challenges and successes perceived by the workers and supervisors and how this developed during the RTW phases. Future research is needed regarding linking the perspectives of workers with disabilities and their employers on how they can facilitate more sustainable RTW; such research is yet scarce. With the exploration of experiences of these dyads, future research could evaluate the supervisor-worker relationship in more detail. In addition, future research could investigate which supportive employer factors are interrelated, and how they influence each other.

Another limitation of our study is that our employer representatives selected more cases of workers with long-term physical disabilities like cancer and heart and cardiovascular diseases, than workers suffering from mental health problems like depression and anxiety. Workers with mental health problems often need other, and more extensive, work accommodations than workers with physical disabilities [54]. Our findings may thus not be fully applicable to workers with mental health problems. This limitation may be linked to the strength of our study that we focused on success stories, maybe the employers only picked cases that were easier to accommodate to the workplace. Which could have resulted in a selection of cases of workers with physical health problems. However, a strength of our study is that we investigated employer support for workers who have partial work capacities and receive disability benefits, which is not often being investigated. Future research could focus on the differences in employer support between workers with physical disabilities and workers with mental health disabilities.

Implications

The role of employers at all levels, from management to supervisors, is important to help workers with disabilities to stay at work. Their provision of instrumental, emotional, and informational support is essential. Emotional and informational support help employers to build a trustful relationship with workers and to provide advice tailored to their needs. It is, therefore, important for employers to develop certain tools if they are to implement the three types of support effectively. One implication of this study is that although support is relevant in all stages of the RTW process, different stages may require different forms of support. Employers need to realize this already during the first phase of RTW. Moreover, collaboration is an important facilitator of all three types of support. HR managers play a large role in improving informational support, for example by educating supervisors in policies and legislations. Also, collaboration with other stakeholders involved in the RTW trajectories makes it easier for employers to arrange work accommodations. Furthermore, regarding employer characteristics, it is helpful when employers focus more on possibilities than on disabilities and barriers. It can also help if they invest in individual and organizational networks, inside and outside the organization.

Conclusions

Throughout the RTW process of workers with disabilities, different types of employer support are important. During sick leave, the RTW process, and for sustainable employment, workers need work accommodations, but also emotional and informational support. Good collaboration and flexibility on the part of both employer and worker are facilitators of optimal interaction during the RTW process. The varying content of employer support over time suggests that RTW is a complex process, indicating the relevance of further investigation. This study underlines the importance of employer support for workers with disabilities, and shows that it should be tailored to the needs of both the employer (i.e., management and supervisors) and the individual worker with disabilities. The type and intensity of employer support varies during the different phases, which is a finding that should be further investigated. In addition, more insight is needed on how this supervisor/worker interaction develops during the RTW process.

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Chapter 5

Experiences of workers with long-term disabilities on employer support throughout the RTW process: an interview study

Jansen, J., Brouwer, S., Alma, M.A., Boot, C.R.L. Experiences of workers with long-term disabilities on employer support throughout the RTW process: an interview study. [Submitted version]

Published as: Jansen J, Brouwer S, Alma MA, Boot CRL. Experiences of workers with long-term disabilities on employer support throughout the RTW process in The Netherlands: a qualitative study.

Disability and Rehabilitation 2025;47(3):601-608

Abstract

Purpose

The aim of this qualitative study was to explore elements of successful RTW related to employer support experienced by workers with disabilities.

Methods

We conducted a semi-structured interview study among 27 workers with disabilities who received a partial disability benefit two years after sick leave and who had managed to retain in the job market after a period of long-term sickness absence (> 2 years). We analysed data by means of thematic analysis.

Results

We identified four types of employer support that were experienced as facilitators or barriers of returning to work: 1. Supervisor accessibility; 2. Supervisor engagement); 3. Supervisor strategies; and 4. Supervisor-initiated work accommodations. More specifically, at the onset of sick leave, the supervisor's active role involved having a positive and open attitude toward facilitating RTW; during the RTW phase, the supervisor's role involved being creative in finding solutions for work accommodations; and after the disability assessment, the supervisor's role included helping workers who still needed changes in their work situations.

Conclusion

The elements of successful employer support reveals that the pressure on the shoulders of the supervisor is high. Future research should further investigate whether supervisors need more phase-specific training from their organization.

Introduction

Over the last decades, many countries have reformed their disability policies because of a rise of spending on full disability benefits of long-term sick listed workers who had residual work capacity, which is assessed by insurance physicians. Advances in disease management, coupled with an ageing workforce and trends to delay retirement, were contributing to these rising numbers of workers facing a work disability. As a result, the eligibility criteria of disability benefits were tightened, and employers were incentivized to encourage work participation of this vulnerable group of workers. Employer support is an important facilitator in the Return to Work (RTW) process of workers with disabilities [1]. It encompasses a range of factors including the provision of work accommodations, social support and on a higher level the role of organizational culture and policies and practices [2]. Supervisors play a crucial role in the implementation of accommodations within the work organization [1]. A supervisor can provide modified work, facilitate access to corporate resources, and communicate a positive message of concern and support [3]. A study on workers who had partially returned to work after sick leave showed that during the RTW process these workers were met with sufficient understanding and social support from their supervisors [4]. Workers on long-term sick leave appreciate contact with their supervisors and workers who had discussed work adjustments with their supervisors to facilitate their return to work experienced better supervisor support than those who did not have these discussions [4].

RTW is often seen as a process rather than a fixed event and can be divided into three different phases: onset of disability, RTW and sustainable RTW [5]. Insight into how workers experience employer support during the different phases of the RTW process is of relevance, because workers 'needs of employer support could possibly change during a long RTW trajectory. Although there are some studies investigating RTW as a process, most of these studies did not investigate the whole RTW trajectory from the onset of sick leave until the application for disability benefit [1,4,6–10]. These studies mainly investigated the first phase of RTW and as a result, did not provide insights into the role of the employer for workers who underwent a disability claim assessment. A study on how supervisors support workers in the early phase of RTW showed that workers perceived maintaining communication during the period of absence and help workers with structuring their RTW process as helpful [9]. In addition, during the RTW phase, workers appreciated improved comprehensive RTW guidance of supervisors, which facilitated successful RTW processes [6]. However, these studies were mainly interested in perceived barriers and facilitators of the work environment to RTW and did not focus specifically on the role of employer support.

In the Netherlands, employers are obliged to pay the salary of their workers during the first 2 years of sick leave and have the responsibility to be actively involved in the RTW process. This implies that for workers with long-term sick leave RTW is a trajectory with different events occurring during these different phases, and in which workers could have different needs concerning support. Moreover, the longer the trajectory, the higher the likelihood of changes in management and supervision during the different phases [9]. To consider the long duration of the RTW process, and potential changes in supervisors, a focus on workers with disabilities who have experienced with all three RTW phases, onset of disability, RTW and sustainable RTW after the disability claim assessment would shed more light into what kind of support is perceived as important during these different phases.

Within this context, the aim of this study is to explore elements of successful RTW related to employer support experienced by workers with disabilities. We selected workers who had managed to retain in the job market after their disability assessment.

Methods

Design

We conducted individual semi-structured interviews with workers with disabilities.

Ethical considerations

We received ethical approval from the Medical Ethical Review Board (METc) of the University Medical Center Groningen. Prior to beginning semi-structured interviews with workers, we obtained their written informed consent. All workers approved audiotaping of the interviews, and their use for scientific research after anonymization.

Selection of workers

We selected workers who had been assessed by the insurance physicians, had partial residual work capacities, and were receiving partial disability benefits due to long-term mental or physical disabilities. We interviewed workers in 2019 who experienced 2-year RTW trajectory from 2017 to 2019 because the RTW trajectory until the disability assessment is two years in the Netherlands. The Social Security Institute for Employee Benefit Schemes (UWV) sent information letters to 200 workers. These letters included information on the aim of the study, the interview procedure, the inclusion criteria, and how to sign up (registration form, or an e-mail or phone call to the researcher). After registration, workers were screened for study eligibility by answering several questions, using Qualtrics, mail, or telephone. Inclusion criteria were: 1) understanding of the Dutch language, and 2) receiving a disability benefit. Around 60 workers indicated their

willingness to participate in an interview. Of these workers we selected 30 workers. We used purposive sampling to recruit workers employed in different sectors and different sizes (small, medium or large). After selection, some workers decided not to participate anymore, which resulted in 27 participating workers.

Procedure

In-depth interviews with the workers were conducted face-to-face and one interview by telephone. JJ conducted all interviews and had not previously met the workers in person. The workers had no connection with the executive research institute. Before being interviewed, workers filled in a short questionnaire to provide background information about: (1) their sector of employment, (2) their function, (3) the date of disability benefit assessment, (4) the type of disability, (5) their number of years of experience in this job, (6) their company size, and (7) whether the employer was insured for sick leave costs (yes/no). The interview guide was structured according to the different phases of the RTW trajectory; questions were about perceptions of workers on what actions employers had taken at the onset of worker's sick leave, and what happened during the period of long-term sick leave (6-8 weeks to 2 years) as well as during the period after 2 years of sick leave, when the worker applied for disability benefits. The interviews lasted 60 – 120 minutes.

Analyses

Interviews were audio-recorded, transcribed verbatim and entered in Atlas.ti 8.4 for analysis. We used qualitative thematic analysis to guide the research analyses [11]. We conducted thematic analyses by developing a systematic coding process to identify themes and patterns in the data. Open coding was used. After this, JJ and MA revised the coding scheme for clarification and added new codes, clustering thematically similar codes into broader codes. This led to a revised code scheme, which was then shared with and controlled by members of the research team (CB, SB and MA). After that, we clustered the codes in themes. Subsequently we investigated how the themes differ over time, which resulted in three different RTW phases in which we clustered the themes. We investigated relationships between themes, and differences within themes, like opposite perspectives. To illustrate the findings, we added representative quotes from the workers, translated by a native English speaker.

Results

Sample describing

Half the number of workers included in this interview study is female and most of the workers were aged 55 or older. The workers were all from different organizations and employed in different regions in the Netherlands, in i.e. the health sector, government, industry, or education. Most of the workers had long-term physical disabilities. Many workers worked 20-24 hours after the disability claim assessment. Half of the number of workers were employed in large organization (>1000).

Themes related to employer support

After data analysis of how participants perceived employer support during a RTW trajectory of two-years follow-up, we identified four themes. The themes related to employer support, experienced either as facilitators or barriers to staying at work, were: (1) supervisor accessibility, (2) supervisor engagement, (3) supervisor strategies and (4) supervisor-initiated work accommodations. The analyses resulted in several sub-themes. The themes were described in chronological order, corresponding with the three RTW phases: sick leave, RTW-phase and sustainable RTW.

Supervisor accessibility

Many workers described how they experienced the accessibility of their supervisors. They mentioned the type of perceived *contact* and how this affected their RTW process. During sick leave, many workers received mail, phone calls or visits from their supervisors. They found this helpful, primarily for staying in touch with the workplace. Contact with supervisors is about finding balance between when (or when not) workers need contact:

> *"Well, above all I also often found, yes the line was short, the contact was good, and be sure to ask, they say you really have to stay in contact with your immediate supervisor, but sometimes it's too – you know, enough. Because then you stay in contact with your work. Otherwise, you just sit at home, yes, I found that difficult. And that's why you have to find out, okay, where do you connect, where don't you connect, are you getting only the information, or not." (Female)*

Workers not receiving this kind of attention from supervisors also stated that the way supervisors communicated with them complicated their RTW process. These workers did not experience **transparent communication** about possibilities for work accommodations, and expressed feeling that more possibilities were available, but finding in the end, that this was not the case:

"The managers are in the hospital … fairly far from the workplace … Meanwhile, before I got sick we had just had a switch in managers so I had actually never had contact with the manager. The manager had also never tried to contact me in the … in the 11 months. So we did it mainly with the team leader, and with the team leader I made working arrangements and activated a parking pass. […] But I just think, above all be honest right from the beginning." (Female)

"Don't give people during a whole year the impression that they are welcome at their own work station and then when the time comes, put a stop to it, when it was already clear for a long time." (Female)

Supervisor engagement

The analyses revealed two types of supervisor engagement: active involvement and personal involvement.

Active involvement

Many workers mentioned the importance of **active involvement** on the part of supervisors. At the start of sick leave, workers found it helpful when supervisors displayed a positive and open attitude towards the possibilities for returning to work. In the first phase, some workers were on long-term sick leave and were unable to make agreements with the supervisor about RTW. Workers appreciated having their supervisors play an active role in the RTW process, doing their best to be of help:

"And then you also notice that the supervisor naturally stands up for you one way or another, that he says they will go back to work is there, of course, and then the attitude is, first see what you can manage, because then I wasn't yet back to work." (Female)

In the RTW phase, workers also appreciated it when supervisors are positive about RTW activities. Supervisors can demonstrate their involvement by actively implementing work accommodations suited to the needs of the worker. Some workers mentioned wanting such a supervisor, but having a supervisor who lacked this involvement resulted in a negative impact on the RTW process:

"But in the end, of course I wanted to get back to work and began to see what I could do, because in my experience a spot would always be made for you. Something that was suitable for you. And then I discovered that in this case that wasn't true at all." (Male)

Some workers mentioned that a positive approach of supervisors after disability assessment is relevant only if changes are made in the work situation, like changes in health conditions affecting their job or changes in the work ethic of the organization. Many of them no longer wanted special treatment and wanted to be treated in the same way as their co-workers:

> *"And then I thought, look, that was my former department head. Then you had the performance review, and every year he said, 'Yes, we are really not so happy with having people work from home.' Then I said, 'but if it's necessary I will just come every day. So, no problem.' 'No, not you. You can work from home, and if you don't feel well. If some, or you think, today it's not going well, then you can work at home.' But I say, but I keep saying, I don't want that, because I don't want special treatment, you know. I think, now that things are going this way, just leave it. Yes, just go along with it." (Female)*

Personal involvement

Workers also appreciated **personal involvement** of their supervisors. They expressed appreciation that the supervisors showed compassion when they were on 'sick leave', and that they focused on what the worker needed instead of only on what was best for the business. Further, during the RTW phase itself they also considered personal involvement of supervisors necessary, but more in the sense of knowing that the supervisor intended to do his/her best to guide the RTW trajectory in a favourable way for the worker. During and after the disability assessment, however, workers considered a personal approach less important. During this phase, some workers made their choice as to whether to involve their supervisor or other employer representatives. One worker gave the following example:

> *"Yes, um, I did have contact with the company doctor once or twice after that, always on my own initiative. Once because I thought it was time again to have a quick check that everything was going as it should. Let's say in the phase when I was gradually getting adjusted to 50% and, and, say, an um, a final situation had been reached in that respect. And once because I met him in the street and said: and 'How is it, everything okay?' 'Everything's fine.' So then I thought, yes, everything isn't fine at all, I'll do a little consultation anyway because, the thing is, on the street you don't go around telling people what's not OK. There's enough, there's really enough that's not OK. But as far as work is concerned, it's, it's just exactly as I told you, but everything else is not good. And I thought, well let me inform the employer, or let me inform the, the oc~ ehm, occupational physician*

a little more carefully about the situation so that when I come back maybe in a year or so, he won't be shocked." (Male)

Workers who had experienced several supervisors described differences between these supervisors to illustrate the importance of active and personal involvement:

"Well, we just recently got a new department head. We had a temporary one and now a new one, yes, nice but very business-like. Young woman and, yes, just business-like. It wasn't, um, very different. Interviewer: Yes, what do you mean with business-like? Well, she didn't have to, because I never really ask for extra attention because I am sick. But like my other department head, she, uh, she already had the doctor's visits in her head. Look, well, but that's not necessary, because I don't need that from her, because that's not at all necessary." (Female)

Some workers mentioned that during the first phase they were assigned a new supervisor or interim manager who had no personal knowledge about or experience with the worker, and was therefore less involved. However, during the RTW phase some were given new supervisors with a more personal approach, which helped the workers to RTW.

"Well, with the first team leader where it, uh, really wasn't possible. I really felt kind of abandoned. [emotional] I was, I think, also kind of angry or so, and okay, I was always sensitive to stress and uh, but then, because you mention it a thousand times and then things go wrong and then there's no time to manage things. I felt that very quickly. However, the other team leader was almost a real coach. What I really needed at that time. That gave me back a bit of self-confidence, I think. And that step by step I could try things, and also in a new department." (Female)

Some workers reported that, due to a lack of personal approach and supervisors' lack of awareness of the kinds of accommodations suitable to their needs, they eventually had to hire a lawyer to ensure that they could continue working in the workplace.

Supervisor strategies

Many participants mentioned examples of supportive supervisor strategies during the RTW, which could be organized under two subthemes: protection and providing leeway.

Protection

Many participants stated the importance during the RTW process of supervisor support that was a careful balance between protection and activation. Most of these workers indicated that their supervisors were mainly protective, setting boundaries for the workers

during the RTW phase and after disability. This was mentioned mainly by workers who according to their social environment, were too active. A worker described the supervisor's protective role in protecting during the RTW phase:

> *"Yes, he had regular talks with me, of course, about how it was going. They are obligated to do that, of course, assessment meetings and talks in case of illness. He often also said that you mustn't go beyond your limits, because then you won't be able to do anything anymore. That's true, but that's just your nature, you can't do anything about it." (Male)*

Many workers expressed that the protection they experienced from supervisors helped them to stay at work in a healthy way:

> *"Because I am a person who keeps going on and if I don't get things done that I, uhhh, um, I, let me say it this way. It's difficult to set limits. And if you go over your limits, now I say, now eh, haha, always afterwards, you are confronted with yourself and then it takes, you really need a lot of time to get back a bit to the same level." (Female)*

Providing leeway

Workers also appreciated receiving time and freedom, especially during sick leave and the RTW phase. These workers did not feel pressured, because their supervisors did not force them to RTW too quickly:

> *"I don't know if I would have been at work sooner or that I might have stumbled and fallen back, but I am glad that I didn't get pushed to go back to work before I felt up to it. And that I was taken seriously when I indicated that it wasn't going well, that they said, well, see what you can do at home. That's why at first we started to increase the hours at home all the way up to, -- I think I was also doing sixteen hours at home, eh … almost sixteen hours, and then I went, eh … then I went back to work. Gradually, but yes, it was done with mutual agreement. So that, uh, yes, in any case without pushing … Well, if they come up with a proposal of well, you, next week you can work so and so much and, uh, or if they had expressed annoyance that it was taking so long. If people put a lot of emphasis on formalities, like you have to do this and you have to do that." (Female)*

Supervisor-initiated work accommodations

Many workers valued practical help from their supervisors, for example, when they facilitated work accommodations and collaborated with the workers in the process towards work accommodations.

Facilitating work accommodations

Some workers explained that thinking about mandatory steps in the RTW process is less relevant while they are still on sick leave and/or recovering from illness or surgery. Workers appreciated having their supervisors consider possibilities for work accommodations already in an early stage. They also appreciated it when supervisors allowed them to come to the office for informal contact with co-workers. In this phase, supervisors asked what the worker needed during sick leave, but also what he/she needed to gradually return to work, such as a separate office:

> *"Because then they said, for example, also if, for example you need to think about something, then you can go to a separate cubicle, and or if you want to isolate yourself, then you can also go to a separate cubicle. I did that at first, but now I don't think that's necessary anymore." (Female)*

During the third phase, workers less often mentioned finding the role of supervisors in facilitating work accommodations important. However, workers who were assigned a new supervisor during this phase mentioned finding it helpful to have these supervisors know about which accommodations had been facilitated by their predecessor.

> *"So in that sense the function has been adapted a bit, that they take that into consideration. Although they did do that, but now I, since I have moved on past a couple of supervisors, I am the one who mainly has to take care of that. … I don't think she really is aware, uh, that we have to be very active and take into account what I ask her to do or whatever." (Male)*

Many workers expressed that having more than one supervisor during the RTW trajectory had impacted the facilitation of work accommodation during the different phases. Workers assigned a new supervisor during sick leave or the RTW-phase experienced more challenges with these switches than workers who got a new supervisor after the disability assessment. This is illustrated by the following two quotes, one about the first phase and the second about the third phase:

> *"I thought, that's strange. They don't even know me. So, it was a very difficult situation and I had to do things I am totally unable to do. And well, I'm a grown up man, you see, but then you get sent to some departments, and that was a kind*

of work where you have to be very concentrated behind a computer. And that is very specific work, not because it is so specific, but if you've just had a heart attack you can't handle things like that. It's just too much pressure. So, I just asked her once, 'Do you have any idea what I have?' and she said 'that really doesn't interest me'." (Male)

"And about the team leaders, getting back to those three team leaders -- the first really cared. And gave all kinds of tips, advice, arranged things right away. The second had something [laughter], she didn't know, 'what should I do about this?' She asked about it and then it was: 'yes, yes, yes, yes'. And the third … yes, she saw me working and doing things and she … didn't even notice that I said 'uh: what about this? What do we do about the 16 hours?' Because at the time I was still receiving disability (WIA) benefits. 'Oh, yes, yes, yes. Yes, that stays the same'." (Female)

Decision-making with regard to work accommodations

During the RTW phase, supervisors followed the **mandatory legal steps**, but also thought 'out of the box' to find suitable solutions with regard to implementing work accommodations. Many workers mentioned that their supervisors involved their workers in the decision-making process, i.e. which work accommodation to be implemented. Together they made decisions about the type of work accommodation. Many workers said that they had collaborated with the supervisor in joint *decision-making* with regards to work accommodations:

"I feel very unproductive part of the time, but that's part of the game, so to speak. We'll find a solution. That is the situation with re-integration that we had, more or less experimentally, developed." (Male)

Discussion

This study sheds some light on the elements of successful RTW related to employer support experienced by workers with disabilities. We were able to explore elements of successful RTW, thanks to our selection of workers who had managed to stay employed after their disability assessment. We focused on the kinds of employer support experienced by workers throughout their process from sick leave to (partial) return to work. Themes related to supervisory behaviour and attitudes that were experienced as facilitators or barriers of successful RTW were: (1) supervisor accessibility, (2) supervisor engagement, (3) supervisor strategies, and (4) supervisor-initiated work accommodation, while taking into

account differences between three RTW phases: sick leave, RTW-phase, and sustainable RTW.

Our findings regarding elements of employer support are in line with those of previous studies, for example those regarding supervisor accessibility [4,7,12,13] and regarding supervisor engagement [14–17]. In our study, workers mentioned having contact with their supervisors through mail, phone calls, or visits during sick leave. They also mentioned finding it important during the process to have transparent communication about the actual possibilities for RTW. This finding corresponds with those of other studies that indicated the relevance of supervisor accessibility by focusing, for example, on the contact between workers and supervisors during sick leave. One study showed that workers appreciate supervisor contact: those who had personal meetings with their supervisors reported higher levels of supervisor support [4]. Another study on the relevance of supervisor skills during RTW mentioned the importance of being fair and honest in communicating with workers with disabilities [14]. Our study pointed out the importance of supervisor engagement, like active and personal involvement during the RTW process, and underlined the value of a positive and open attitude on the part of supervisors toward possibilities for returning to work and implementing work accommodations. Our findings further emphasized how supervisors' personal involvement could be demonstrated by compassion and a focus on the needs of the worker, and not only on the interests of the business; it was about knowing that the supervisor was willing to do everything necessary to accomplish the RTW trajectory in a way beneficial to the worker. Our research confirmed that of previous studies underlining the importance and necessity of supervisors' positive attitudes and empathic support for workers with disabilities during the process of RTW [13–17].

The supervisor strategies reported in our study included being protective and providing leeway. Previous studies also indicated the importance of setting boundaries, albeit in the context of the inability of workers to set boundaries in their work and RTW [18]. Further, we found themes related to supervisor-initiated work accommodations. These themes focused on methods of facilitating work accommodation and the need for collaboration between workers and supervisors to make choices as to which accommodations should be implemented. Most workers in the present study mentioned being actively involved in the process. Previous studies have also dealt with work accommodations, taking into account both formal and informal work accommodations. Formal work accommodations include changing working hours and tasks, and allowing working from home [2]; informal work accommodations include, for example, having co-workers temporarily assume (some of) the disabled worker's tasks [19]. Further, our finding regarding the importance of good collaboration between worker and supervisor regarding work accommodations

corresponds with that of previous research in which employers emphasized the importance, for RTW, of self-management for workers on long-term sick leave [19].

Workers explained that the four overarching themes of employer support are important throughout the entire RTW process, but that during the three RTW phases the type and intensity of the types of support can differ. In all phases the supervisor's active and personal involvement was perceived as a relevant element of employer support. But more specifically, at the onset of sick leave the supervisor's active role involved having a positive and open attitude toward facilitating RTW; during the RTW phase, the supervisor's role involved being creative in finding solutions for work accommodations; and after the disability assessment, the supervisor's role included helping workers who still needed changes in their work situations. Workers further mentioned the protective behaviour of supervisors, mainly during the RTW phase and after the disability assessment, when supervisors set boundaries to keep workers from going beyond their personal limits.

Strengths & limitations

An important strength of the present study is its selection of workers who had experience with all phases of the RTW process, and who had successfully managed to remain in the job market after their disability assessment. This gave us the opportunity to learn about different elements of supervisor support throughout the RTW process. Previous research has less often studied this specific group of workers. Another strength of our study is that we focused on employer support throughout the three different phases of RTW (the onset of sick leave, long-term sick leave, and the period following application for disability benefits). Purposeful sampling is a technique widely used in qualitative research to identify and select information-rich cases in order to use limited resources most effectively [20]. This involves identifying and selecting individuals, or groups of individuals, who are especially knowledgeable about or experienced with a phenomenon of interest. Different from quantitative research, generalizability is not key to qualitative research as this relates to a very specific sample. In qualitative research, transferability is an important aspect to consider [21]. In the Netherlands, we have a social security system that is very different from other countries as the employer is responsible for paying wages in the first two years of sick leave. However, we expect that the results of this study can be transferred to similar populations in other countries as key aspects of supervisor support we found in this study seem largely independent of social security systems.

Implications

The support of the employer is found to be crucial to help workers on long-term sick leave to return- to and remain at work. Our study showed different elements of supervisor support to be relevant during the different phases of RTW. This implies great pressure on supervisors, as they need to be all-round. It is questionable whether all supervisors are

always able to fulfil this role. Supervisors may need more training in skills relevant for RTW, not often having faced cases of long-term sick leave. Employers should therefore ensure that the supervisors in their company are better equipped to fulfil this important role, for example by providing a skill-development program and including relevant competences in their leadership profile. It is recommended that organizations support and coach their supervisors in the skills needed to support workers on long-term sick leave. At the organizational level, knowledge of and experience with this target group can be combined to make best practices available to supervisors who lack experience with the group. It should be noted that an important precondition for supervisors to apply these skills is the provision of resources for work accommodations. These should be provided to supervisors by the employer. Future research should focus on ways for organizations to coach supervisors in developing their skills for supporting RTW. Further research could, for example, investigate whether supervisors need more support from management in order to fulfil their supportive role right from the start of sick leave.

Conclusion

This study provides insight into elements of employer support experienced as successful by workers with disabilities during sick leave, RTW and after the disability assessment. Workers mentioned the following determinants of employer support related to the main themes: contact and transparent communication with the supervisor, active and personal involvement of the supervisor, protection and providing leeway by the supervisor; and facilitating support and collaboration in work accommodations. Our findings point to significant pressure on the shoulders of the supervisor, who needs to fulfil an all-round role. It is recommended that organizations support and coach their supervisors in the skills needed to support their workers on long-term sick leave. Our study also showed the relevance of focusing on the different RTW phases, because workers expressed that various aspects of the four overarching themes of employer support are important throughout the RTW process. Future research should further explore the different types of support throughout the different RTW phases and to investigate whether supervisors need more phase-specific training from their organization in how to approach these different RTW phases.

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Chapter 6

Discrepancies between workers with disabilities and their supervisors in reported work accommodations and associations with return to work

Published as: Jansen, J., Snippen, N., Koning, P., Boot, C.R.L., van Ooijen, R., Brouwer, S. Discrepancies between workers with disabilities and their supervisors in reported work accommodations and associations with return to work.

BMC Public Health 2023; 23(1), 525.

Abstract

Background

The aims of this study were: (1) to explore the frequency of discrepancies in work accommodations reported by workers and their supervisors, and (2) to investigate whether these discrepancies are associated with full return to work (RTW).

Methods

We used data from a longitudinal survey study of long-term sick-listed workers and their supervisors (n = 406). Discrepancies in reports on implementing eight types of work accommodations were explored. Logistic regression analyses were conducted to test associations between discrepancies in reported work accommodations and odds of full RTW 27 months after the sick-leave onset.

Results

Discrepancies were the lowest for the work accommodation therapeutic RTW (53%) and the highest (85%) for job training or education and reimbursement of therapy or treatment. Four out of eight types of work accommodations were more often reported by workers than by their supervisors. Only a discrepancy on a job reassignment within the organization was associated with lower odds of full RTW (OR 0.56, 95%-CI 0.36–0.88).

Conclusions

We found substantial discrepancies in the reported implementation of work accommodations between workers and their supervisors. Future research should focus on disentangling mechanisms that lead to discrepancies to avoid inefficiencies in the RTW process.

Introduction

Work accommodations, such as job task modifications, workplace adjustments, or reduced working hours, play an essential role in enabling long-term sick-listed workers to return to work (RTW), either fully or partially [1, 2]. To foster the implementation of work accommodations, many countries have developed long-term sick leave policies entitling long-term sick-listed workers to work accommodations to enable them to resume work [3]. Usually, long-term sick-listed workers and their supervisors have a shared responsibility in deciding on the type of suitable work accommodations [1]. They are typically expected to collaborate in the RTW process, but each has a distinct role and responsibilities [4]. While supervisors are primarily responsible for initiating and implementing work accommodations by modifying the terms and conditions of employment or facilitating adjustments in the workplace [5], workers are expected to collaborate and communicate their needs to their supervisors.

Since workers and supervisors have a shared responsibility in implementing work accommodations, one might expect that workers and supervisors would report similarly on which work accommodations have been implemented during the worker's RTW process. Stated differently, any discrepancies in perceived accommodations may point to inefficiencies in the RTW process. Indeed, prior studies have found such discrepancies in the perceptions of workers and supervisors about work functioning, supervisory skills, and safety climate. These studies show that these discrepancies are negatively associated with work-related outcomes like job satisfaction or organizational commitment [6–9]. Although this evidence highlights the potential importance of discrepancies in perceptions of workers and supervisors for several work-related outcomes, no prior research has investigated the possible association between discrepancies in reported implementation of work accommodations and RTW after long-term sick leave.

So far, the literature on work accommodations has provided evidence that there are discrepancies between workers and supervisors in reported reasons for accommodations not being fully granted, as well as between implemented and desired work adjustments [10, 11]. For discrepancies in the reported implementation of work accommodations, such evidence is lacking. Arguably, these discrepancies in how workers and supervisors perceive the implementation of work accommodations may have significant consequences for the RTW process. Consequently, considering the perspectives of both supervisors and workers may provide a more complete picture of adequate implementation of work accommodations by supervisors [9, 12].

This study, therefore, aimed to (i) explore the frequency of discrepancies in reported work accommodations between workers that have been sick-listed for longer than 9 months and their supervisors and (ii) investigate whether these discrepancies are associated with

the odds of full RTW of these workers (i.e., working the same hours as before reporting sick at the same or another employer).

Materials and methods

Design

We conducted a secondary analysis on data of a longitudinal survey entitled “pathways-to-disability-survey” in the Netherlands in 2007 [13]. This survey was conducted among 4,019 long-term sick-listed workers that had been sick-listed for more than 9 months. These workers were reported sick within three weeks before or after January 1, 2007, and had not (fully) returned to work nine months later. The data collection among workers consisted of three waves. Workers were asked to fill in a questionnaire at 9 months, 18 months, and 27 months after starting sick leave. The data collection among supervisors consisted of one wave (> 27 months after the start of the worker’s sick leave). At 27 months after the start of sick leave, workers who filled in all three questionnaires (n = 1,579) were requested to ask their supervisors to participate in the survey. In total, 680 supervisors filled in the questionnaire in response to the invitation from participating workers. In this study, we only used data from complete cases, in the sense that we only included couples in which both the worker and supervisor responded to the questions about work accommodations. Furthermore, we included only couples in which at least one person indicated that one or more work accommodations were implemented. With these restrictions, the final study sample consisted of 406 couples of workers and supervisors. There were no statistically significant differences between included and excluded couples with regard to baseline characteristics (i.e., gender, age, educational level, type of disability) and RTW outcomes of workers. The sample selection process is visualized in Figure 1.

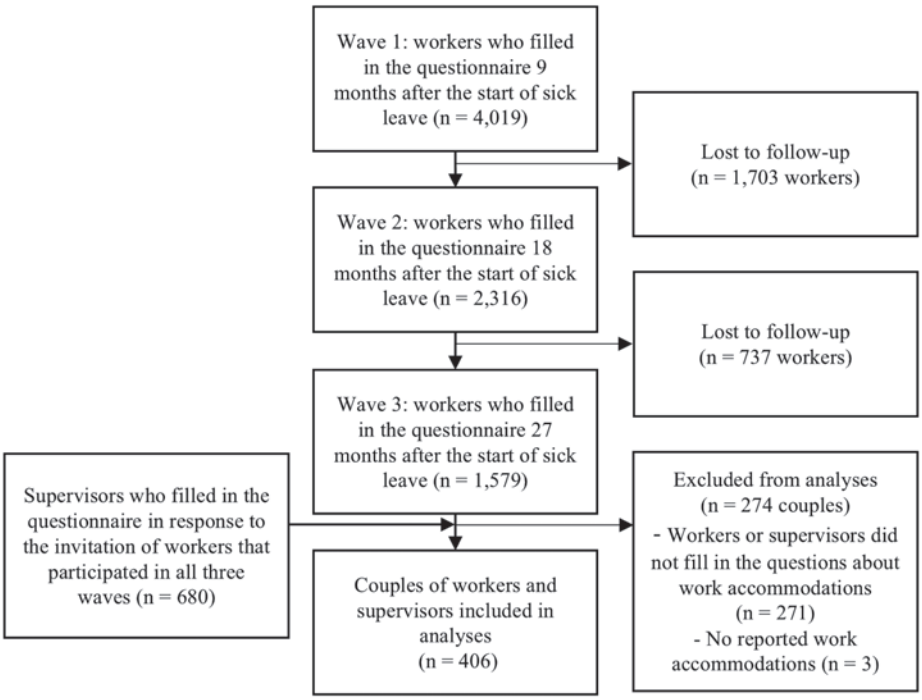

Figure 1. A flow-chart depicting the inclusion and exclusion of workers and supervisors in the questionnaire waves and the included couples in the analyses

Measures

Primary outcome

The primary outcome measure was full RTW (i.e., working the same hours as before reporting sick) at the same or another employer at 27 months after starting sick leave, measured in the third wave. Workers were asked to indicate their RTW status using the following response options: no RTW, partial RTW, and full RTW. We recoded the variable into a binary variable: full RTW versus partial or no RTW.

Implementation of work accommodations

In this study, we used data of workers and their supervisors about the implementation of work accommodations undertaken by the supervisor. Reports about the work accommodations implemented by the supervisor were measured using a multiple response item. In this item, workers and supervisors were asked to indicate which work accommodations were implemented by the supervisor to support the worker to return to work or to continue employment. Workers and supervisors could select one or more answers from the following categories: (1) reimbursement of therapy or treatment, (2)

counseling or coaching, (3) job reassignment within the organization, (4) therapeutic RTW: modified job duties recognizing work as therapeutic in itself, (5) workplace adaptation or equipment, (6) job training or education, (7) reduction in working hours, and (8) task modifications. For workers, we considered a work accommodation to be reported when the worker had selected this type of work accommodation in at least one of the three waves.

To explore the frequency of discrepancies, couples were grouped based on combined worker-supervisor responses on implementing specific work accommodations. For this first research question, for each work accommodation we only looked at couples in which at least one person had reported the implementation of the work accommodation. For each of the eight work accommodations, couples were grouped into one of the three following categories: (1) only reported by the worker, (2) reported by workers and supervisors, and (3) only reported by the supervisor.

For the second research question, to investigate whether discrepancies in reported work accommodations are associated with RTW, binary variables were created for the eight work accommodations. For these binary variables, couples were grouped based on whether both persons in a couple reported that a work accommodation had or had not been implemented (i.e., the agreement group) or whether only one person in the couple had reported the implementation of the work accommodation (i.e., the discrepancy group).

Sociodemographic measures

At baseline, data was collected about the following worker characteristics: age in years (categorized as < 34, 35–44, 45–54, 55–65), gender (male/female), educational level (low/medium/high), and type of disability (somatic/mental/mixed) (see Table 1). No data was available on the sociodemographic characteristics of participating supervisors because this was not collected in the questionnaires.

Analyses

Quantitative data were analyzed using SPSS version 26. Descriptive statistics (e.g., frequencies and percentages) were used to describe the study sample and explore discrepancies between workers and supervisors about implemented work accommodations. We performed Chi-square analyses and logistic regression analyses to investigate whether discrepancies in reported work accommodations are associated with full RTW, applying a significance level of 0.05. In the logistic regression analyses, age, gender, and disability type (somatic/mental/mixed) were included as covariates.

Results

As explained, 406 workers and supervisors were included. A slight majority of workers was female (52.6%). Most workers were between 45 and 65 years old (73.2%) and had received a medium or high level of education (63.6%). Most workers (71.6%) had a somatic disease, particularly musculoskeletal disorders (37.2%) and 61.3% of the workers reported full RTW at 27 months after starting sick leave. Of the workers that had not fully returned to work at 27 months (38.7%), 40.8% had partially returned to work. More detailed demographic information of participating workers is provided in Table 1.

Table 1. Workers' characteristics

Characteristics	Total sample	(*n* = 406)
Age in categories (years)		
<34	29	(7.1%)
35-44	80	(19.7%)
45-54	166	(40.9%)
55-65	131	(32.3%)
Gender		
Male	192	(47.3%)
Female	214	(52.7%)
Disability type		
Somatic	255	(71.6%)
Mental	81	(20.0%)
Mixed	34	(8.4%)
Educational level[1]		
Low	138	(34.0%)
Medium	129	(31.8%)
High	129	(31.8%)
Full RTW at 27 months after the start of sick leave		
Yes	249	(61.3%)
No	157	(38.7%)

[1]Low educational level = primary education, pre-vocational secondary education (VMBO); Medium educational level = senior general secondary education (HAVO), pre-university education (VWO), secondary vocational education (MBO); High educational level = higher professional education (HBO), university education (WO), doctorate (PhD). Contains n =10 missing observations

Discrepancies in reported work accommodations between workers and supervisors

The number and percentages of discrepancies between workers and supervisors on the reported work accommodations are presented in Figure 2. Within the couples in which an

accommodation was reported by at least one person, the discrepancies ranged between 53 and 85%. The lowest discrepancy was found for therapeutic RTW, the highest (85%) for job training or education and reimbursement of therapy or treatment. Workers reported four work accommodations more often than their supervisors: reimbursement of therapy or treatment (82%), counseling or coaching (64%), job reassignment within the organization (50%) and therapeutic RTW (39%). For instance, regarding the work accommodation therapy or treatment, the implementation was in most cases only reported by the worker (82%). Similarly, supervisors reported four work accommodations more often than the worker: workplace adaptation or equipment (39%), job training or education (55%), reduction in working hours (34%) and tasks modifications (48%).

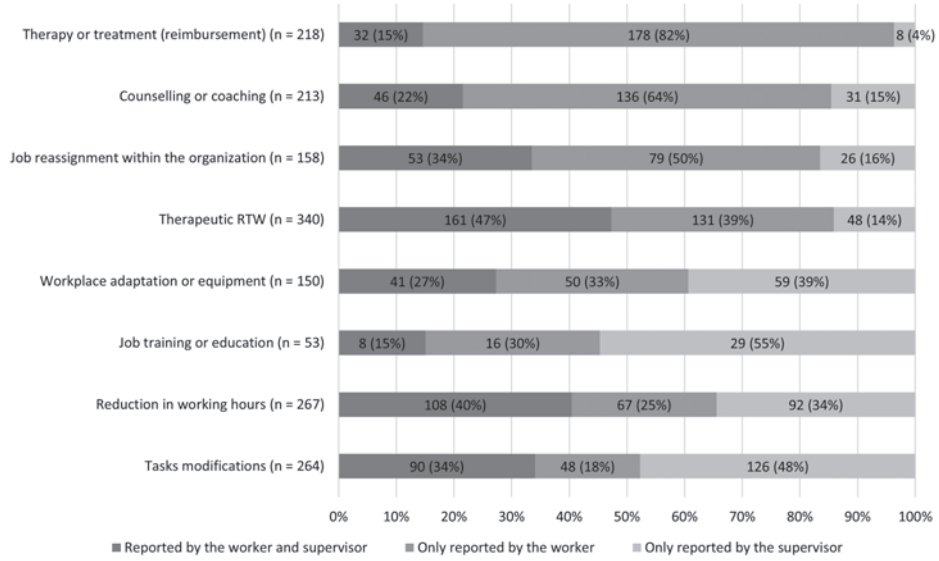

Figure 2. Implemented work accommodations (n) reported by only the worker, the worker and the supervisor and only the supervisor

Associations between discrepancies in reported work accommodations and RTW

Chi-Square Tests of Independence were performed to assess the relationship between RTW status at 27 months after the first day of sick leave and the eight work accommodations (Table 2). The results showed that the proportion of workers that had fully returned to work differed depending on whether or not there was a discrepancy in the reported implementation of a job reassignment within the organization ($\chi^2 = 5.85$; $df = 1$; $p = .02$). Workers who agreed with their supervisor about whether or not there had been a job

reassignment within the organization were more likely to be fully back at work at 27 months. No other statistically significant associations were found.

Consistent with the Chi-square tests, logistic regression analysis showed that a discrepancy in the reported implementation of a job reassignment within the organization was associated with lower odds for RTW (OR 0.56, 95%CI: 0.36–0.88). No other statistically significant associations were found. The associations are presented in Table 3.

Table 2. Crosstabs and Chi-square Tests of Independence to determine the associations of discrepancies with reported work accommodations

Work accommodation	**Full RTW at 27 months (n, % within row)**		**Chi square test (1, *N* = 406)**	
	No	Yes	χ^2	*p*
Therapy or treatment (reimbursement)			0.40	.53
Agreement	82 (37.3%)	138 (62.7%)		
Discrepancy	75 (40.3%)	111 (59.7%)		
Counseling or coaching			2.46	.12
Agreement	100 (41.8%)	139 (58.2%)		
Discrepancy	57 (34.1%)	110 (65.9%)		
Job reassignment within organization			5.85	**.02***
Agreement	106 (35.2%)	195 (64.8%)		
Discrepancy	51 (48.6%)	54 (51.4%)		
Therapeutic RTW			2.85	.09
Agreement	96 (42.3%)	131 (57.7%)		
Discrepancy	61 (34.1%)	118 (65.9%)		
Workplace adaptation or equipment			0.04	.85
Agreement	114 (38.4%)	183 (61.6%)		
Discrepancy	43 (39.4%)	66 (60.6%)		
Job training or education			0.04	.85
Agreement	139 (38.5%)	222 (61.5%)		
Discrepancy	18 (40.0%)	27 (60.0%)		
Reduction in working hours			0.27	.60
Agreement	98 (39.7%)	149 (60.3%)		
Discrepancy	59 (37.1%)	100 (62.9%)		
Task modifications			1.18	.28
Agreement	95 (40.9%)	137 (59.1%)		
Discrepancy	62 (35.6%)	112 (64.4%)		

*p<0.05

Table 3. Logistic regression of discrepancies about work accommodations being implemented by the supervisor associated with odds of actual RTW of workers on long-term sick leave

Discrepancy on work accommodations (binary)* (agreement=ref)	Odds ratio	Lower 95%CI	Upper 95%CI	P-value**
Therapy or treatment (reimbursement)	1.42	0.94	2.14	0.72
Counseling or coaching	1.35	0.89	2.06	0.16
Job reassignment within organization	**0.56**	**0.36**	**0.88**	**0.01****
Therapeutic RTW	1.42	0.94	2.14	0.09
Workplace adaptation or equipment	0.96	0.60	1.52	0.85
Job training or education	0.95	0.50	1.80	0.87
Reduction in working hours	1.11	0.73	1.70	0.64
Task modifications	1.22	0.81	1.83	0.35

* Adjusted for age, gender, and type of disability; ** p <0 .05

Discussion

Our findings on discrepancies in reported work accommodations, in case an accommodation was reported by at least one person (Figure 2), show substantial discrepancies between workers and their supervisors in their reports on implemented work accommodations. Within the couples in which an accommodation was reported by at least one person, discrepancies in reported implementation of the eight work accommodations were the lowest for therapeutic RTW (53%) and the highest (85%) for job training or education and reimbursement of therapy or treatment. Reimbursement of therapy or treatment, counseling or coaching, job reassignment within the organization, and therapeutic RTW were more often reported by workers than their supervisors. Notably, the present study indicates that a discrepancy between workers and supervisors on whether a job reassignment within the organization was implemented was associated with a 50%-point lower probability of full return to work at 27 months after the start of sick leave. Other than for job reassignment, no statistically significant associations were found between discrepancies in reported work accommodations and full RTW.

The observed differences in discrepancies between the eight work accommodations may well reflect different levels of involvement of the worker or the supervisor in implementing

each work accommodation. For example, reimbursement of therapy and coaching was more often only reported by the worker, while a reduction in working hours and task modifications were more often only reported by the supervisor. A possible explanation is that the work accommodations that the worker more often reports are initiated by other stakeholders arranging the accommodation, like an outplacement agency or a case manager. In these cases, the supervisor is not necessarily informed, for instance, because of privacy regulations. On the other hand, supervisors more often reported the implementation of work accommodations that have a direct and formal impact on the job, like reduction of working hours and modifications in work tasks. This might be explained by different perceptions of how these work accommodations are defined. Workers and supervisors thus have both overlapping and distinct roles in the RTW process within their shared responsibility. The overlapping roles relate to being actively involved in the RTW process. The distinct roles relate to the specific tasks workers and supervisors have regarding implementing work accommodations. While the worker usually collaborates with work accommodations, the supervisor's primary role is to ensure that the work accommodations are implemented [14]. When workers and supervisors do not commit to a shared responsibility, their distinct roles may (in part) explain the discrepancies found regarding some work accommodations [4].

Except for one type of work accommodation (i.e., job reassignment within the same organization), discrepancies in reported work accommodations were not associated with full RTW. Although there are only minor indications that discrepancies are associated with full RTW, future research should focus on disentangling mechanisms that lead to discrepancies, as discrepancies may lead to inefficiencies in the RTW process that should be avoided. The only significant finding concerned the perceived occurrence of job reassignments within the organization. Job reassignment within the same organization is one of the most commonly implemented work accommodations, along with reductions in working hours and task modifications [15, 16]. The start of a new job position or having new tasks within the same organization is usually implemented when other measures are not feasible and might be an intervention of last resort [15]. This in itself may indicate that full RTW is more difficult, which is also mirrored by fewer hours worked by long-term sick-listed workers and workers with disabilities [16] and lower residual employment durations after work resumption [17]. In addition, workers and supervisors may have different perceptions of whether the specific work accommodations were implemented. This highlights that empirical analyses regarding implemented work accommodations are largely contextual and include measurement errors. However, our results do not indicate that potential discrepancies that could result from misreporting if workers are dissatisfied with the RTW process are associated with worse reported RTW outcomes. At the same time, other measures that proxy perceptions regarding the RTW process, such as the

feeling of injustice or dissatisfaction with work, are probably more likely to be significantly associated with perceptions regarding the RTW process.

Strengths and limitations

A strength of this study was the use of data from couples of workers and their supervisors. Previous studies examining associations between work accommodations and RTW were based on information from the worker or the supervisor perspective, but not from both. By comparing information from both the worker and the supervisor, we were able to show that discrepancies are prevalent, and that a combined investigation of workers' and supervisors' perspectives provides different, likely more complete, information on the implementation of work accommodations. Another strength of this research is the long-term follow-up of the survey study, which allowed us to investigate the associations of discrepancies in reported work accommodations with full RTW at 27 months after the start of sick leave.

This study also has some limitations. While we performed secondary analyses on data from a survey conducted in 2007, we assume that the discrepancies still exist nowadays because no major institutional changes were made since then affecting the RTW process. Furthermore, we cannot rule out information bias because workers and supervisors completed the questionnaires at different points in time. The recall period regarding the implemented work accommodations differed substantially between supervisors (> 27 months after the start of sick leave) and workers (at 9 months, 18 months, and 27 months after the start of sick leave), which may have affected our findings. Possibly, the timing of the supervisor questionnaire led to a larger risk of recall errors by supervisors on the implementation of work accommodations. This could thus explain some of the discrepancies between workers and supervisors in reported work accommodations. In addition, no detailed information on the supervisor was collected in the survey; therefore, we could not control for the supervisor-characteristics.

Implications

When implementing work accommodations during long-term sick leave, workers and their supervisors have a shared responsibility for the success of the RTW process. Meaning that workers and their supervisors collaboratively make decisions and discuss the options and the likely benefits and harms of each option while considering the worker's values, preferences, and circumstances. However, from our analysis, we infer that there are substantial discrepancies in reported work accommodations between workers and their supervisors. Although the analyses did not show significant results concerning the effect of discrepancies in seven work accommodations on RTW, we cannot exclude the possibility that proxies for the actual collaboration of supervisors and workers are still important. For example, in the Netherlands, workers and supervisors write a RTW plan 12 weeks after the onset of sick leave. Although this action is required by law, it is possible that workers and

supervisors only have a formal conversation about the RTW plan without making specific agreements about the implementation of work accommodations and who is responsible for the implementation process [18]. Even though this study is a secondary analysis of data collected with another purpose, the data show the presence of large discrepancies that deserve further exploration in future studies, as these discrepancies may be a barrier for successful RTW. Future research should therefore focus on disentangling mechanisms that lead to discrepancies in reported work accommodations, to avoid inefficiencies in the RTW process. This requires insight into aspects of shared decision-making, and in the communication between supervisors and workers about the implementation of work accommodations.

Conclusion

We found substantial discrepancies in the reported implementation of work accommodations between workers and their supervisors. In case an accommodation was reported by at least one person, workers more often reported work accommodations like coaching and reimbursement for therapy than their supervisors. In contrast, supervisors more often reported work accommodations like task modification and working hours reduction than workers. Except for one type of work accommodation, i.e. job reassignment within the same organization, discrepancies in reported work accommodations were not associated with full RTW. Future research should focus on disentangling mechanisms that lead to discrepancies in reported work accommodations to avoid inefficiencies in the RTW process.

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Chapter 7

General Discussion

General Discussion

The overall aim of this thesis was to examine the role of the employer in facilitating work participation of workers with disabilities. In this chapter, the main findings are summarised and discussed following the three research questions that were stated in the introduction: 1. What is the role of the employer in facilitating support for workers with disabilities to promote work participation? 2. How do workers with disabilities experience employer support during the RTW process? And 3. What are the differences between employers and workers in their perspectives regarding implementing work accommodations? Alongside this, some of the methodological issues and implications for research and practice in this dissertation are addressed. The chapter ends with an overall conclusion.

Main findings

What is the role of the employer in facilitating support for workers with disabilities to promote work participation?

The systematic review of the literature (Chapter 2) gave an overview of determinants of employer support related to work participation of workers with disabilities. Fourteen employer-related determinants were found, which could be clustered in four employer-domains: social support, work accommodations, organizational culture and organizational characteristics. At the supervisor level, we found moderate evidence for a positive association between perceived social support and RTW. We found strong evidence for a positive association between work accommodations and continued employment and RTW. On the organizational level, we found weak positive evidence for organizational culture and RTW and inconsistent evidence for organizational characteristics and continued employment and RTW.

The survey study (Chapter 3) gave more insight into the perception of the employer regarding the opportunities for accommodated work for workers with disabilities. It showed that employers perceive fewer opportunities of accommodated work for lower educated workers compared to higher educated workers. In addition, it showed that employers perceive fewer opportunities for higher educated workers with mental health problems compared to higher educated workers with physical problems. Moreover, the study indicated that employers often find it difficult to find suitable work for people with disabilities because of the type of work within the organization. This applies especially to the lower educated workers, who are less employable in various other functions. Particularly in smaller organizations, organizations in the private sector, organizations with few jobs for the lower educated, and organizations with many flexible workers, it is difficult to find appropriate work for lower educated people with disabilities. This may indicate that work retention for these people is determined not only by the willingness of

employers, but also by the limited potential of some organizations to offer new or adapted functions. Moreover, if employers bear less responsibility for partial work disability they are less willing to invest in re-integration activities.

The interviews with employer representatives (Chapter 4) allow for more in-depth analyses of the different roles an employer can take in accommodating workers with disabilities and also examines specific facilitators of employer support. We identified three types of employer support with several subthemes: 1. Instrumental support (offering work accommodations); 2. Emotional support (encouragement, empathy, understanding); and 3. Informational support (providing information, setting boundaries). We also identified three facilitators of employer support (at organizational and supervisor levels): 1. Good collaboration, including (in)formal contact and (in)formal networks; 2. Employer characteristics, including supportive organizational culture and leadership skills; and 3. Worker characteristics, including flexibility and self-control. This study showed that different types of employer support and facilitators of employer support are perceived by employer representatives as helpful throughout the RTW process. The result that the content of employer support varies along the phase of the RTW process highlights the difficulty for supervisors in providing adequate support. This study underlines the importance of employer support for workers with disabilities, and shows that it should be tailored to the needs of both the employer (i.e., management and supervisors) and the individual worker with disabilities.

How do workers with disabilities perceive employer support during the RTW process?

The interviews in a sample of workers with disabilities and who were on (partial) long-term sick leave (Chapter 5) resulted in the identification of four main types of employer support: 1. Supervisors' accessibility (contact and honest communication); 2. Supervisors' engagement (active and personal involvement); 3. Supervisor strategies (protection and providing leeway); and 4. Supervisory supportive behaviour (facilitating work accommodations and collaboration in accommodations). The support of the employer is found to be crucial to help workers on long-term sick leave to return to and remain at work. Our study showed different elements of supervisor support to be relevant during the different phases of RTW. The type and intensity of employer support varies during the different RTW phases, i.e. onset of sick leave, RTW and the disability claim assessment. In all phases the supervisor's active and personal involvement was perceived as a relevant element of employer support. More specifically, at the onset of sick leave the supervisor's active role involved having a positive and open attitude toward facilitating RTW; during the RTW phase, the supervisor's role involved being creative in finding solutions for work accommodations; and after the disability assessment, the supervisor's role included

helping workers who still needed changes in their work situations. Workers also stressed the importance of protective behaviour of supervisors, mainly during the RTW phase and after the disability assessment, when supervisors can set boundaries to keep workers from going beyond their personal limits.

What are the differences between employers and workers in their perspectives regarding implementing work accommodations?

The findings of a survey study among workers with disabilities and their supervisors (Chapter 6) show that there are substantial discrepancies in reported work accommodations by workers and their supervisor. Discrepancies were the lowest for therapeutic RTW (53%) and the highest (85%) for education or training and reimbursement of therapy or treatment. Five out of eight types of work accommodations were more often reported by workers than by their supervisors. A discrepancy on a (perceived) job change within the organization was significantly associated with fifty percent lower odds of full RTW. Although we did not find further significant associations between discrepancies in work accommodations and RTW, disentangling mechanisms that lead to discrepancies is necessary to avoid inefficiencies in the RTW process and preventable exit from the labour force.

Interpretation of the findings

In the general introduction (chapter 1) we indicated that a deeper understanding of the supportive role of the employer throughout the RTW process could provide important input for future interventions. This to encourage employers to facilitate these workers to continue in paid employment. The findings of the qualitative studies provide evidence that different types of employer support (i.e. instrumental support, emotional support and informational support) are perceived to be relevant for this group of workers throughout the RTW process. Also, the type and intensity of employer support may vary during the RTW phases. These findings indicate what constitutes "good" social support during the RTW process, as it gives a more detailed description of the type of support that is provided, *what* perceived employer support is, *how* it is provided and *by whom*, and *how* and under *what* conditions it may affect work outcomes of workers with disabilities [1]. Although in social support theory a clear distinction between different types of support is made [2], this distinction has not been given much attention in empirical research on employer support so far. This thesis attempts to fill that gap. The measurement of support is complex, since there are different operationalizations and measures of this concept in the research literature [2,3]. The existing measures differ widely with regard to the conceptualisation and operationalisation of support and most constructs seem to have been created ad hoc, without clarifying and agreeing on what constitutes support by consulting other researchers [1,2]. The research in this thesis constitutes a first step to further develop the

construct of 'support' within the field of RTW and work disability, and can be used as a starting point for further research in this context.

Our findings have also shed new light on differences between formal support and informal support systems at the worksite that play a role in the RTW process of workers with disabilities. Formal support concerns the type of support which operates within the context of a structure on the organizational level [4], such as standardized procedures about implementing work accommodations, and services provided by trained professionals (HR professional, occupational professional and case managers). This includes all activities formulated within RTW policies at organizational or policy level. Informal supports are the many forms of helpfulness and assistance people freely give to each other, which are often simple strategies that can be implemented on a day to day routine [5]. This includes support a person receives at the worksite from colleagues, line-managers and supervisors [6]. From our interview studies we learned that, for example, the willingness of co-workers to (temporary) take over tasks without interference of supervisors or the support provided by the supervisor's personal social network can be effective in the RTW process. The important role of informal support is not new and has been reported in studies in other research fields like youth and family care [7,8] and in studies using different work outcomes like well-being at work [9]. Most quantitative studies focus on formal support, as it is easier to measure [3]. Despite popular emphasis on formal work accommodations, evidence on their effectiveness is relatively weak and inconclusive (see chapter 2). From literature on social support it is known that formal and informal support systems can strengthen each other, and both are needed to help a person thrive [9]. Therefore, recognizing that both formal and informal supports are needed to improve RTW outcomes of workers with disabilities, a better understanding of the role of informal support is important.

Another key finding of this dissertation is that interpersonal interaction between workers with disabilities and their employers is essential for a successful RTW process [10]. Interpersonal interaction concerns the way both actors communicate to each other, as well as how they spend their time together [11]. Interpersonal interaction theory suggests that satisfactory interactions occur when two individuals have compatible characteristics [12]. The findings in this dissertation show that especially the way supervisors and workers interact with each other and discuss each other's responsibilities, values and behaviours is important throughout the RTW process. For example, the interview studies showed that being a proactive employer and being a proactive worker could make the RTW process easier. If the worker is not proactive, supervisors should motivate their workers to come in action and vice-versa. In addition to these activating and motivating skills, a positive attitude towards workers with disabilities, and skills related to being creative to find new opportunities for continued employment. This interaction goes beyond the formal

requirements of the Dutch Gatekeeper Protocol which describes that the workers and employers should have formal conversations about what kind of RTW activities should be implemented and whether the implemented RTW activities comply with the needs and wishes of the worker. Consequently, the match between supervisors' and workers' characteristics is important, as this has impact on how smooth the RTW process is perceived and how employers and workers with disabilities perceive their relationship [12]. If there is no match between the supervisor and worker, other employer representatives (e.g., HR) may help to facilitate this process.

Methodological considerations

Throughout this dissertation, we made use of a mixed methods approach using qualitative and quantitative methods to investigate the role of the employer in facilitating work participation of workers with disabilities. The combination of different research methods has several advantages for a systematic development of knowledge about the role of the employer in the RTW process of workers with disabilities. By using this approach, we were able to get a broader view on the elements of employer support, both from the worker and employer perspective.

Still, there are several methodological considerations that need to be taken into account in the analyses that have been conducted. First, the narratives of employer representatives about their own role in the RTW process of workers with disabilities as well as the narratives of workers themselves could be influenced by their memory recall about occurred events and could also be dominated by intensely negative or positive experienced events [13]. It could have been the case that the participants in our qualitative studies (chapter 4 and 5) only recall for example events that were obliged by the Dutch Gatekeeper Protocol. To minimize the recall bias in the qualitative studies, we made use of a chronological order of questions about the role of the employer during the RTW process of one or more cases, which may have helped the participants to not only think about the more salient events they experienced, but also about day-to-day support they provided or received.

Second, the specific group of individuals that we have studied in all chapters consisted of workers with disabilities facing long-term RTW (2 years of RTW process) which are deemed to have sufficient residual work capacity. These workers were assessed for the disability claim two years after the onset of sickness and had an employer throughout the RTW process. We argue this group is of particular interest, since the existing literature mostly focuses on sick-listed workers that have not applied for disability benefits so far. In the different studies we included in total 436 of these workers and 1227 employers. We are aware that this is a small selection of the total population and that both in the

interview and survey studies persons were included who were motivated to share their actual experiences (either positive or sometimes negative). Still, our primary aim was to learn from workers who were able to continue working after the onset of sickness, who did (or did not) receive elements of employer support that were perceived as helpful by the workers and/or their supervisors. Alongside this, for the recruitment of workers and representatives of employers for the interview studies we made use of registry data of the Dutch Social Security Institute to sample our participants, which resulted in a heterogeneous sample of both workers and employers. The survey study also contained a representative sample of long-term sick-listed workers which was constructed by the registry data of the Dutch Social Security Institute.

Recommendations for research, policy and practice

This dissertation sheds light on the role of the employer support in facilitating work participation of workers with disabilities. Based on the findings of this thesis and the topics that have been discussed in this chapter, we have recommendations for future research as well as policy recommendations regarding the role of the employer. In addition, recommendations for practice are formulated for different stakeholders involved in facilitating work participation of workers with disabilities.

Recommendations for future research

The following directions for future research follow from this dissertation.

- It is relevant to investigate in more detail how organizations can support supervisors in increasing their supervisory skills. It would for example be helpful to investigate whether supervisors need more support and what kind of support from their management would work in order to fulfil their supportive role right from the start of sick leave.
- As we found several successful elements of employer support, we recommend to further investigate which measures and interventions based on these elements of employer support are relevant for workers with disabilities and in which phases of RTW.
- For future survey-studies it would be interesting to investigate which representatives are involved in the RTW process and what their contribution is to the associations between RTW activities and work participation outcomes. This then would provide more insights into the specific roles of the different employer representatives.
- More in-depth qualitative research is needed in order to gain insight into the relevance of informal support, which conditions are underlying informal support and how it can be measured to further investigate the association between informal support and

work participation as well as the interaction between formal and informal support throughout the RTW process.

Recommendations for policy

The following policy recommendations follow from this dissertation.

- For supervisors and workers it is helpful that HR management establishes a well explained policy about possibilities for work accommodations (e.g., a protocol), to ensure that supervisors know about the different types of support they can offer during the RTW process.
- Facing the growing shortage of workers in the Netherlands and other OECD countries due to population ageing and the growing number of job vacancies, more investments should be made by the government and/or in sectors. Besides a key role of employers who are responsible for all groups in the labour market, the government should focus on offering accommodated jobs and educational training facilities for workers with disabilities, so as to prevent involuntary early labour market exit of workers with residual work capacity.

Recommendations for practice

The following recommendations for practice follow from this dissertation.

- Improving supervisors' communication skills with regards to work accommodations is recommended, i.e. focus on early and honest communication about work accommodation possibilities; active and personal involvement; protection and providing leeway; and facilitating work accommodations and shared-decision making. Increased awareness among supervisors about their responsibilities in offering work accommodations, and about their possibilities to ask for support from the organization, for example resources for implementing work accommodations, is highly recommended.
- In line with this, organizations may develop a training to learn supervisors about their role in the RTW process and about the different types of support they can offer. Specifically, they may develop visuals which may help the supervisor to communicate with the worker about the consequences of the disease for their current work, to find out which kind of work accommodations may fit to the needs and wishes of the worker and what other kind of support the worker needs. As the employer can be represented by several actors, like the daily supervisor, case managers and HR managers it is important to find the representative who is most suited to support workers in the realisation of work accommodations.

General conclusion

This dissertation offered new insights into the role of employers in guiding workers with disabilities throughout the RTW process, from the onset of sick-leave until after the disability claim assessment. Different types of formal and informal support were identified, and the type of support differed during the RTW process. Instrumental support mainly plays a role at the start of sick leave and RTW phase, while emotional support plays a role throughout the RTW process, although the intensity differs and the type of informational support differs per RTW phase. Employers perceive their supportive role differently for higher educated workers than for lower educated workers. In particular for lower educated workers employers perceive fewer possibilities for accommodated work, due to i.e. the job type. In addition, the interaction between workers and supervisors in their communication and in implementing work accommodations was found to be relevant. When comparing the perceptions of employers and workers regarding implemented work accommodations, we found that there are discrepancies in reporting about the work accommodations. This shows that the supervisor-worker relationship is important. There is room for improvement on employer level (supporting supervisors) and supervisor level (skills and communication).

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Appendix

Summary

Samenvatting

Dankwoord

Summary

The overall aim of this dissertation is to generate knowledge on the role of the employer in facilitating work participation of workers with disabilities, i.e. workers with residual work capacity due to long-term disabling physical and/or mental health conditions. Specifically, I address the following three research questions:

1. What is the role of the employer in facilitating support for workers with disabilities to promote work participation? (Chapter 2, 3, 4)
2. How do workers with disabilities perceive employer support during the RTW process? (Chapter 5)
3. What are the differences between employers and workers in their perspectives regarding the implementation of work accommodations? (Chapter 6).

In **Chapter 1** an overall introduction is provided to address the importance of the topic of this thesis, to explain the study setting and to describe the definitions of used concepts. Several industrialised countries have reformed their disability programs over the past decades to foster labour market integration of people who face challenges staying or re-entering the workforce due to illness or disabilities. This was warranted because several demographic trends, including an ageing working population facing (chronic) diseases. Together with this, older workers may also be more inclined to leave the labour market due to ill health, resulted in growing governmental spending on disability insurance and health care costs. In this context, employers are stimulated to accommodate or adapt job tasks for those with disabilities, and thereby has come to play a key role in stimulating reintegration and sustainable work participation of workers with disabilities. However, in work and health research the role of the employer in the RTW process in our target population is still under-studied.

Chapter 2 presents a systematic literature review on the determinants of employer support related to work participation of workers with disabilities. We conducted an interdisciplinary search using four databases: Pubmed, PsycINFO, Web of Science and EconLit (inception of databases until 17 April 2018). Three key concepts were central to the search: 1. employer characteristics; 2. work participation; and 3. chronic diseases. In this study we found 14 employer-related determinants that could be clustered into four employer-domains: 1. work accommodations; 2. social support; 3. organizational culture; and 4. organizational characteristics. At the level of the supervisor, we found strong evidence for an association between work accommodations and continued employment and RTW. We found moderate evidence for an association between social support and RTW. On the organizational level, we found weak evidence for organizational culture and RTW and inconsistent evidence for organizational characteristics and continued employment and RTW.

Chapter 3 describes the findings of a cross-sectional survey study that aimed to provide more insight into the perception of the employer regarding opportunities for accommodated work for workers with disabilities. Analysed data were collected in 2019 as part of a large-scale questionnaire survey among employers, 'Remaining longer at work in a flexible labour market'. A total of 791 employers from a sample of 5000 organizations (with at least 10 employees each) responded to the survey. The findings of this study showed employers experience less opportunities of accommodated work for lower educated workers compared to higher educated workers. Moreover, employers often find it difficult to find accommodated work for people with disabilities because of the type of work within their organizations. This applies especially to the lower educated workers, who are less employable in various other functions. Particularly in smaller organizations, organizations in the private sector, organizations with few jobs available for workers with lower educational levels, and organizations with many flexible workers, it is difficult to find appropriate work for lower educated people with disabilities. Moreover, if employers bear less responsibility for partial work disability they are less willing to invest in re-integration activities.

In **Chapter 4** the findings of an interview study among employer representatives are presented. This study aimed to gain more insight in the different roles an employer can take in accommodating workers with disabilities and to examine facilitators of employer support. In this study, we conducted interviews with 27 employer representatives (i.e. case manager, supervisor, HR manager) who successfully retained worker(s) with disabilities within their organization. We asked employer representatives to take one or more workers with disabilities in mind who were able to continue working and asked them questions about their role throughout the RTW process. We conducted thematic analyses on the data and identified three types of employer support with several subthemes: 1. instrumental support (offering work accommodations); 2. emotional support (encouragement, empathy, understanding); and 3. informational support (providing information, setting boundaries). We identified three facilitators of employer support (at organizational and supervisor levels): 1. good collaboration, including providing (in)formal contact and availability of (in) formal networks; 2. employer characteristics, including supportive organizational culture and leadership skills; and 3. worker characteristics, including flexibility and self-control.

Chapter 5 describes the experiences of workers with long-term disabilities on employer support throughout the RTW process. An interview study among 27 workers with disabilities who were on (partial) long-term sick leave was conducted. We used thematic analyses to analyse the data. This study reveals how workers perceive employer support throughout the RTW process. We identified four types of employer support and several subthemes: 1. supervisors' accessibility (contact and honest communication); 2. supervisors' engagement (active and personal involvement); 3. supervisor strategies

(protection and providing leeway); and 4. supervisory supportive behaviour (facilitating work accommodations and collaboration in accommodations). The type and intensity of employer support varies during the different phases.

Chapter 6 presents the findings of a survey study among 406 couples of sick-listed workers and supervisors to explore the frequency of discrepancies in reported work accommodations, and to investigate whether these discrepancies are associated with full RTW. We conducted secondary analyses on data of a longitudinal survey study on the RTW trajectory of workers towards disability benefit and found large discrepancies in reported work accommodations by workers and their supervisors. Five out of eight types of work accommodations were more often reported by workers than by their supervisors. Frequency of discrepancies was the lowest for therapeutic RTW (53%) and the highest (85%) for education or training and reimbursement of therapy or treatment. A discrepancy on a job change within the organization was significantly associated with fifty percent lower odds of full RTW.

In **Chapter 7** presents the general discussion of this dissertation, focusing on the main findings of each chapter, methodological considerations, and implications for policy, practices and directions for further research. Overall, the findings of this dissertation offered new insights into the role of employers in guiding workers with disabilities throughout the RTW process, from the onset of sick-leave until after the disability claim assessment: 1. different types of formal and informal support were identified; and 2. the type and intensity of employer support may vary during the RTW phases. These insights offer important implications for policy and practice. For supervisors and workers it is helpful that HR management formulates policy on possibilities for work accommodations (e.g., a protocol), as it is key and that they know about the different types of support a supervisor can offer during the RTW process. In addition, all supervisors should be aware about their responsibilities in offering work accommodations, and ask for support from the organization, for example resources for implementing work accommodations, if needed. In line with this, organizations may develop a training to teach supervisors about their role in the RTW process and about the different types of support they can offer.

Samenvatting

Van werknemers die als gevolg van ziekte gedeeltelijk of tijdelijk arbeidsongeschikt zijn verklaard wordt verwacht dat ze indien mogelijk deelnemen aan de arbeidsmarkt en hun arbeidspotentieel benutten. Echter, slechts een klein deel van deze mensen participeert daadwerkelijk in regulier werk. Een onontbeerlijke schakel daarbij spelen werkgevers, voor wie het veelal niet eenvoudig blijkt om werknemers met een arbeidsbeperking in dienst te houden of te nemen. Tot op heden is er weinig kennis over de groep mensen die het lukt hun resterend arbeidspotentieel na de WIA-beoordeling wel duurzaam te benutten en actief te blijven of re-integreren op de arbeidsmarkt en de rol die de werkgevers hierin hebben. Het doel van dit proefschrift is derhalve om inzicht te krijgen in de wijze waarop de werkgever bijdraagt aan het bevorderen van arbeidsparticipatie van werknemers met een arbeidsbeperking als gevolg van langdurige fysieke of mentale gezondheidsproblemen. Het onderzoek richt zich op de volgende drie vragen:

1. Wat is de rol van de werkgever bij het bieden van geschikte werkaanpassingen en steun aan werknemers met een arbeidsbeperking om de arbeidsparticipatie te bevorderen? (Hoofdstukken 2, 3 en 4)
2. Hoe ervaren werknemers met een arbeidsbeperking de steun van de werkgever tijdens het re-integratieproces? (Hoofdstuk 5)
3. Wat zijn de verschillen tussen werkgevers en werknemers in hun perceptie van het bieden van geschikte werkaanpassingen door de werkgever bij de terugkeer naar werk? (Hoofdstuk 6)

Hoofdstuk 2 beschrijft een systematisch literatuuronderzoek naar de determinanten van steun door de werkgever met betrekking tot arbeidsparticipatie van werknemers met een arbeidsbeperking. We hebben hiervoor gezocht in vier databases met artikelen en discussion papers: PubMed, PsycINFO, Web of Science en EconLit (tot 17 april 2018). Drie kernconcepten stonden centraal in de zoekopdracht: 1. werkgeverskenmerken; 2. arbeidsparticipatie; en 3. chronische ziekten. Uit deze studie kwamen 14 werkgever gerelateerde determinanten naar voren die konden worden gegroepeerd in vier domeinen: 1. werkaanpassingen; 2. sociale steun; 3. organisatiecultuur; en 4. organisatiekenmerken. Op het niveau van de leidinggevende vonden we sterk bewijs voor een verband tussen werkaanpassingen en behoud van werk en re-integratie. Er was matig bewijs voor een verband tussen sociale steun door de leidinggevende en re-integratie. Op organisatieniveau vonden we zwak bewijs voor een verband tussen organisatiecultuur en re-integratie en inconsistent bewijs voor een verband tussen organisatiekenmerken en behoud van werk en re-integratie.

In **hoofdstuk 3** is onderzocht in hoeverre werkgevers mogelijkheden zien voor aangepast werk voor werknemers met een arbeidsbeperking. De gegevens werden in 2019 verzameld

als onderdeel van een grootschalige werkgeversenquête 'Langer doorwerken in een flexibele arbeidsmarkt'. In totaal vulden 791 werkgevers uit een steekproef van 5000 organisaties (met elk minimaal 10 werknemers) de enquête in. De resultaten laten zien dat werkgevers minder mogelijkheden zien voor aangepast werk voor laagopgeleide werknemers dan voor hoogopgeleide werknemers. Bovendien vinden werkgevers het vaak lastig om (tijdelijk) passend werk te vinden voor mensen met een beperking vanwege de beperkte beschikbaarheid van ander type functies binnen hun organisatie. Dit geldt vooral voor laagopgeleide werknemers, die minder inzetbaar zijn in andere functies. Vooral in kleinere organisaties, in de private sector, in organisaties met weinig functies voor laagopgeleide werknemers en in organisaties met veel flexibele werknemers is het moeilijk om passend werk te vinden voor laagopgeleide werknemers met een arbeidsbeperking.

Hoofdstuk 4 beschrijft de bevindingen van een interviewstudie onder werkgevers, met als doel meer inzicht te krijgen in de verschillende rollen die een werkgever kan vervullen en bevorderende factoren bij het ondersteunen van werknemers met een arbeidsbeperking. De interviewstudie omvatte 27 interviews met personen met verschillende rollen in het re-integratieproces (zoals casemanagers, leidinggevenden en HR-managers) én die erin waren geslaagd om werknemers met een arbeidsbeperking binnen hun organisatie te behouden. Uit thematische analyses kwamen drie vormen van ondersteuning door de werkgever naar voren met verschillende subthema's: 1. instrumentele ondersteuning (werkaanpassingen aanbieden); 2. emotionele ondersteuning (aanmoediging, empathie, begrip); 3. informationele ondersteuning (informatie verstrekken, grenzen stellen). Daarnaast identificeerden we drie categorieën van factoren die ondersteuning door de werkgever kunnen bevorderen: 1. goede samenwerking (formele en informele contacten en netwerken); 2. werkgeverskenmerken (ondersteunende organisatiecultuur en leiderschapsvaardigheden); 3. werknemerskenmerken (flexibiliteit en eigen regie).

In **hoofdstuk 5** zijn de ervaringen van werknemers met langdurige beperkingen met betrekking tot steun door de werkgever tijdens het re-integratieproces onderzocht. Hiertoe is een interviewstudie uitgevoerd bij 27 werknemers met een arbeidsbeperking én die (gedeeltelijk) arbeidsongeschikt waren. De data werden geanalyseerd met behulp van thematische analyses. De belangrijkste bevinding van dit onderzoek was dat het type en de mate van steun door de werkgever varieert in verschillende fasen van het re-integratieproces. Vier vormen van steun door de werkgever werden hierbij onderscheiden: 1. toegankelijkheid van de leidinggevende (contact en open communicatie); 2. betrokkenheid van de leidinggevende (actieve en persoonlijke betrokkenheid); 3. leiderschap (bescherming bieden en flexibiliteit); 4. ondersteunend gedrag van de leidinggevende (werkaanpassingen faciliteren en samenwerken).

Hoofdstuk 6 maakt gebruik van een vragenlijstonderzoek onder 406 duo's van langdurig zieke werknemers en leidinggevenden. Doel van deze studie was om 1. verschillen in gerapporteerde werkaanpassingen te onderzoeken en 2. na te gaan in hoeverre deze verschillen samenhangen met volledige terugkeer naar werk. We maakten daarbij gebruik van gegevens van het 'Weg naar de WIA' enquêteonderzoek naar het re-integratietraject van langdurig zieke werknemers. De resultaten laten grote verschillen zien tussen de rapportages van zieke werknemers en leidinggevenden over werkaanpassingen. Vijf van de acht gevraagde werkaanpassingen werden vaker gemeld door werknemers dan door hun leidinggevenden. Het verschil tussen werknemers en werkgevers was het kleinst voor therapeutische werkhervatting (53%) en het grootst (85%) voor opleiding/training en vergoeden van therapie of behandeling. Het verschil tussen zieke werknemers en leidinggevenden met betrekking tot de werkaanpassing 'andere functie binnen de eigen organisatie' was statistisch significant geassocieerd met een kleinere kans op volledige terugkeer naar werk.

Hoofdstuk 7 vat de belangrijkste bevindingen van dit proefschrift samen, reflecteert op de bevindingen, gaat op methodologische overwegingen, en geeft implicaties voor beleid die volgen uit de resultaten. Op basis van de resultaten in de verschillende studies is het belangrijk dat organisaties de mogelijkheden voor werkaanpassingen duidelijk vastleggen in hun HRM-beleid, omdat het essentieel is dat leidinggevenden en werknemers weten welke vormen van ondersteuning mogelijk zijn in het re-integratieproces. Daarnaast dienen leidinggevenden goed op de hoogte te zijn van hun verantwoordelijkheden bij het aanbieden van werkaanpassingen en dat zij waar nodig ondersteuning krijgen vanuit de organisatie, bijvoorbeeld financiële middelen om benodigde werkaanpassingen te bieden. Het is tevens aan te bevelen om trainingen te geven aan leidinggevenden om hen te informeren over hun rol in het re-integratieproces en de verschillende vormen van steun die zij kunnen bieden.

Dankwoord

Het werken aan dit onderzoek was een intensief en leerzaam proces. Door persoonlijke omstandigheden was het voor mij onmogelijk de laatste twee jaar te werken aan de afronding van mijn promotie. Ik ben veel dank verschuldigd aan allen die het mogelijk maakten dat mijn promotie toch kan plaatsvinden. Graag wil ik een aantal mensen in het bijzonder bedanken.