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The assessment of efforts to return to work

Muijzer, Anna

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Anna Muijzer

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1

Introduction

Background

Assessing the quality of the Return-to-Work (RTW) process and the efforts made during the RTW process are important issues when considering applications for disability benefits. In recent years, disability benefit policies have changed in several European countries in order to reduce the inflow into disability benefit schemes[1]. These policy changes include the emphasis on participation and the quality of the RTW process, rather than on level of impairment and disability[1-3].

In the Netherlands, the quality of the RTW process is assessed as part of a policy change as described in the Dutch Gatekeeper Act[4,5]. This Gatekeeper Act is a law designed to reduce the inflow into disability benefit schemes by assessing the RTW Effort Sufficiency (RTW-ES). Before passing 'the gate' to the assessment of functional and earning capacity as part of the disability evaluation, the sufficiency of the efforts made by the sick-listed employee and his/her employer are assessed. This assessment is designed to ensure the quality of the RTW process, and to ensure that both employee and employer take their responsibility to optimize the chance to RTW. In 2010, the assessment of RTW-ES was performed over 27,000 times, of which in 1267 cases (4.7%) the efforts were deemed insufficient[6].

The RTW-ES assessment takes place after two years of sickness absence, and is performed by a Labor Expert (LE) of the Dutch Social Insurance Institute (SII, National Institute of benefit Schemes, Uitvoeringsinstituut Werknemersverzekeringen (in Dutch)) (See figure 1).

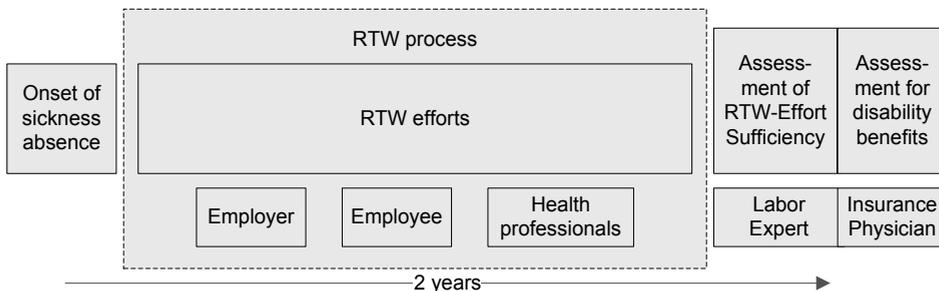


Figure 1. A description of the Return-to-Work (RTW) process in relation to the assessment of Return-To-Work Effort Sufficiency (RTW-ES) and the assessment for disability benefits

The RTW-ES assessment takes place only if the employee has remaining work ability, but has not returned to work fully after two years of sickness absence.

The assessment of RTW-ES is based on a reintegration report, which is written by both employer and employee. The reintegration report includes a problem analysis, i.e. a mandatory description of the (dis)abilities of the employee by an occupational physician

(OP) of the Occupational Health Service (OHS) hired by the employer, an action plan, i.e. the plan designed to achieve work resumption, and the employee's opinion regarding the RTW process. Also in the reintegration report are records of all interventions, intermittent RTW process advice by independent professionals, and agreements between employer and employee.

The LE's who assess RTW-ES are specialists in the field of vocational rehabilitation, and after graduating, have followed a one to two year intensive postacademic in-company training. The LE's assess whether all opportunities for RTW or improvement of work ability have been examined and undertaken if applicable. The LE's also focus on the context of the RTW process, i.e. factors which might influence the RTW process and its quality. The LE's consider only the non-medical aspects of the RTW process, but they can consult a Social Insurance Physician (SIP) about the medical aspects of the RTW process. If necessary, the LE's can consult the employer, employee, or other professionals to gather or verify information.

The Gatekeeper Act and its related legislative appendices describe the formulation of the reintegration report on which the assessment is based. Furthermore, an expert group consisting of representatives of potential stakeholders – e.g. policy makers of the Dutch SII, LE's, OP's, Patient Associations, Employer Union representatives and the Ministry of Social Affairs and Employment – has designed a framework which describes both procedural aspects of the assessment and the required content of the reintegration report in more detail[7,8]. However, both the assessment by the LE and the factors on which it is based have not been subject of scientific research.

The assessment of RTW-ES is essential for the quality of the RTW process and its outcome. Insufficiency of the efforts made in the RTW process can prolong the time to RTW, and can cause premature claims for disability benefits. In the Netherlands, if the RTW efforts are considered insufficient, the assessment for disability is delayed for a maximum of one year or until the employer and employee have performed the necessary efforts. During this year, the financial responsibility remains with the employer.

Although research on disability and RTW outcome has led to significant advances in understanding about these outcomes, limited studies focus on measuring aspects of the RTW process[9]. Considering the importance of a high-quality RTW process, investigating RTW process outcomes like RTW-ES is an important addition to current RTW research.

Assessing an outcome such as the sufficiency of efforts made in the RTW process is an elaborate and complicated decision making process[10,11]. The variability between assessors can be high due to the differences in information obtained, information processed or interpretation. Considering the gravity of the RTW-ES assessment, an optimal assessment

quality is essential. This means that LE agreement, and the transparency and reproducibility of the RTW-ES assessment should be as high as possible. The quality of an assessment can benefit from the development and introduction of an evidence-based protocol[10,11]. However, until now, no evidence-based protocol for the assessment of RTW-ES is available.

Protocol development can be described in four steps[12,13]. A first step in the development of a protocol is to investigate the relevance of the protocol subject. A second step is to collect evidence on which the protocol content will be based, i.e. which factors are relevant to the protocol. A third step in the development of a protocol is the formulation of the concept protocol and the consultation of experts. A fourth step in the development of a protocol is empirical testing.

Objectives of this thesis

The main research objective was to develop and evaluate a protocol for the assessment of RTW-ES.

Other research objectives were to investigate:

- whether the assessment of RTW-ES is performed in other European countries, and if so, what its characteristics are;
- factors related to RTW-ES and RTW and their comparability;
- the factors relevant to the assessment of RTW-ES in cases of sick-listed employees with Chronic Low Back Pain (CLBP) and Depressive Disorder (DD);
- the effect of the introduction of a protocol for the assessment of RTW-ES in terms of LE agreement, and feasibility.

Outline of the thesis

Chapter 2 investigates whether the assessment of RTW-ES takes place in other European countries as part of the application for disability benefits by means of qualitative analysis on data collected by EUMASS/TNO. By means of a questionnaire study and additional interviews the RTW-ES assessment characteristics are investigated in terms of 1) subject of the assessment, 2) prerequisites for the assessment, 3) availability of guidelines and use of the International Classification of Functioning, Disability and Health (ICF) model, 4) background of the assessor, 5) information used for the assessment, and 6) aim of the assessment.

Chapter 3 focuses on the strength and relevance of factors related to RTW-ES and RTW outcome among employees applying for disability benefits after two years of sickness absence by means of a survey study and multilevel logistic regression analysis. Moreover, the comparability of the factors associated with RTW-ES and RTW is investigated.

Chapter 4 describes the focus group study in which the factors relevant to the assessment of RTW-ES in cases of sick-listed employees with CLBP are investigated.

Chapter 5 describes the focus group study in which the factors relevant to RTW-ES in a case of a long-term sick-listed employee with a DD are examined.

Chapter 6 focuses on the effect of the introduction of the RTW-ES protocol, which was developed using the evidence collected in the previous chapters. The effect of the introduction of the RTW-ES protocol for the assessment of RTW-ES is investigated by means of a repeated measurement, before and after the introduction of the RTW-ES protocol. The effect of the protocol introduction is measured in terms of agreement in 1) RTW-ES outcome and 2) importance of factors. The feasibility of the RTW-ES protocol is also investigated in terms of 1) satisfaction, 2) suggestions for improvement, and 3) time investment.

Chapter 7 describes the main findings, issues concerning the RTW-ES assessment, methodological issues and implications for practice. The thesis is concluded with suggestions for further research and a general conclusion.

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2

The assessment of efforts to return to work in the European Union

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Abstract

Background: Assessment of efforts to promote return-to-work (RTW) include all efforts (vocational and non-vocational) designed to improve the work ability of the sick-listed employee and increase the chance to return to work. Aim of the study was to investigate whether in 13 European countries these RTW efforts are assessed and to compare the procedures by means of 6 criteria.

Methods: Data were gathered in the taxonomy project of the European Union of Medicine in Assurance and Social Security and by means of an additional questionnaire.

Results: In seven countries RTW efforts are subject of the assessment in relation to the application for disability benefits. Description of RTW efforts is a prerequisite in five countries. Guidelines on the assessment of RTW efforts are only available in the Netherlands and no countries report the use of the ICF model. Based on the results of the additional questionnaire, the assessor is a social scientist or a physician. The information used to assess RTW efforts differs, from a report on the RTW process to medical information. A negative outcome of the assessment leads to delay of the application for disability benefits or to application for rehabilitation subsidy.

Conclusion: RTW efforts are assessed in half of the participating European countries. When compared, the characteristics of the assessment of RTW efforts in the participating European countries show both similarities and differences. This study may facilitate the gathering and exchange of knowledge and experience between countries on the assessment of RTW efforts.

Key Words: Return-to-work; Disability Insurance; Vocational Rehabilitation; Work

Introduction

In recent years, disability benefit policies have changed in several European countries in order to reduce the inflow into the disability benefit schemes[1]. These policy changes include the emphasis on participation and return-to-work efforts (RTW efforts), rather than on level of impairment and disability[1-3]. RTW efforts include all efforts (vocational and non-vocational) undertaken by the employer and employee to improve the work ability of the sick-listed employee in the period between onset of sickness absence and the application for disability benefits[4]. Assessing an outcome such as the efforts made in the RTW process is an elaborate and complicated decision making process[5,6]. Several authors mention characteristics which may influence this assessment process[5,7,8].

Over the years, many studies have been published about the assessment of disability benefits[2,9,10]. In the Netherlands, a national description about RTW efforts as part of the assessment of disability benefits is available and described in a guideline for the assessors[4]. Up to now, no scientific publication about RTW effort assessment is available. Furthermore, information is lacking about whether the RTW efforts are part of the assessment of disability benefits in other European countries too. It is known that countries differ substantially in aspects included in the assessment of disability benefits[1,11,12]. Against the background of international comparison regarding social policies this lack of research about RTW effort assessments in other European countries seems undesirable[1,3].

The aim of this study was to investigate whether in 13 European countries RTW efforts are assessed as part of the application for disability benefits and to get insight in and to compare the procedures described. The main question answered by this study is: 'Are RTW efforts in the European Union assessed as part of the application for disability benefits?' For those countries which assess RTW efforts, some additional questions were answered regarding 1. subject of the assessment, 2. prerequisites for the assessment, 3. availability of guidelines and use of the ICF model, 4. background of the assessor, 5. information used for the assessment and 6. aim of the assessment.

Methods

A description of the Dutch procedure of the assessment RTW efforts was made using a national description of the Institute of Social Insurance[13]. Data about other European countries was gathered by using two different sources. Firstly, analyses were performed on data gathered in the taxonomy project of the European Union of Medicine in Assurance and Social Security (EUMASS) and a Dutch research institute (TNO Quality of Life), concerning

assessment in relation to the application for disability benefits[14]. In the taxonomy project, data was gathered in 2007 by means of semi-structured open question interviews about 11 European countries: Belgium, Czech republic, Ireland, Finland, France, Germany, Italy, Norway, Slovakia, Slovenia and Sweden. During the research project, additional information about Denmark was collected as well because of recent relevant developments in this country in the field of return-to-work efforts[13]. The information on Denmark was collected by means of a short questionnaire, which was added to the additional questionnaire for the second part of the study.

Information was available in the taxonomy project on three characteristics (Table 1): 1) subject of the assessment, by asking about aspects on which the claimant is assessed, 2) prerequisites for the assessment, by asking about the work which has to be done before a claim is presented and the timespan in which that work has to be done, and 3) availability of guidelines and use of the ICF model. Furthermore, the respondents were asked about whether the International Classification of Functioning, Disability and Health (ICF) model[15] is used in their country in relation to the assessment (see Table 1).

Secondly, in order to get insight in procedures used in the assessment of RTW efforts, those countries were selected by the researchers in which RTW efforts were part of the subject of the assessment, or description of RTW efforts was a prerequisite of the assessment. Contact persons present on the EUMASS congress 2008 were asked to answer questions regarding the assessment of RTW efforts or to forward the questions to experts who might act as representatives (See appendix A). In this part, information about three other characteristics was gathered: 4. the assessor (and his/her background), 5. information (its availability and source) and 6. aim of the assessment (including outcomes and consequences) (Table 1). The representatives have written down their own answers or the data was summarized by the researcher (AM) and then confirmed by the representatives.

Subsequently, the collected data of each of the selected countries were described and presented in tables. In case further clarification of the information received by the representatives was needed, the first author (AM) contacted the respondents.

Table 1. Definition of the six characteristics of the assessment

Characteristic	Method
Subject of the assessment	Taxonomy study
Prerequisite of the assessment (criteria and timespan)	Taxonomy study
Availability of guidelines, use of the ICF model	Taxonomy study
Assessor	Questionnaire
Information used in the assessment (availability and source)	Questionnaire
Outcomes and consequences of the assessment	Questionnaire

Results

In table 2 and 3 results are presented of the comparison between the 13 participating European countries on the 6 criteria. Based on the results of the taxonomy project a description of the three criteria was made (Table 1).

Regarding the subject of the assessment (criterion 1), RTW efforts undertaken and possibilities for future RTW efforts are part of the assessment in seven of thirteen European countries (Denmark, Finland, Germany, the Netherlands, Norway, Slovakia, Slovenia) (Table 2). Part of the subject of the assessment in the Netherlands is whether there are remaining possibilities for rehabilitation or RTW, i.e. whether the employee is able to return to work at all, for example by means of work accommodations. These possibilities are subject of the assessment in four out of thirteen countries (Czech Republic, Denmark, Finland and the Netherlands) (Table 2).

Two prerequisites for assessment (in- and exclusion criteria and timespan; criterion 2) are described: a report in which a description is given about the RTW efforts and level of RTW. This includes all activities performed by the employer and employee to promote RTW, whether this has resulted in RTW, and if so, if the RTW is acceptable in terms of wages and/or hours. The description of RTW is a prerequisite in Belgium, Denmark, Germany, Italy, the Netherlands and Slovenia.

The period of sickness absence after which the assessment can take place varies from 2 weeks (Belgium) to no fixed timespan (Finland (Kela system), Italy, Slovakia and Slovenia) (figure 1). In other countries, the period of sickness absence extends to ten months (Finland (TyEL system)) or to one year (Czech Republic, Denmark, Ireland, Sweden). In France and Norway the period is a minimum of one year to a maximum of two years, extends to a maximum of two years in the Netherlands, and extends to a maximum of five years of sickness absence in Germany.

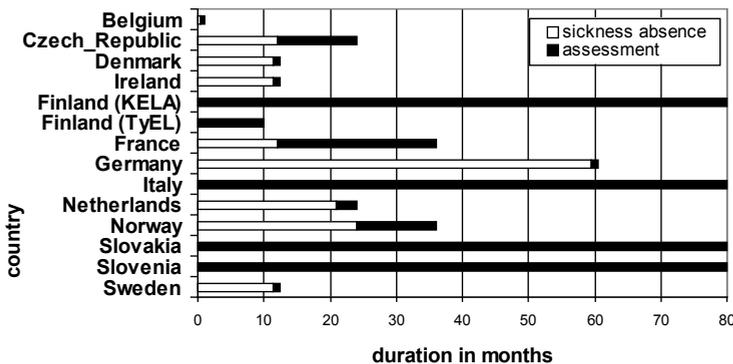


Figure 1. The period of sickness absence and the period during which the assessment of disability benefits takes place in months for thirteen European countries

Official guidelines (criterion 3) concerning the assessment of RTW efforts are only available in the Netherlands[4]. In other European countries no guidelines or specific legislation regarding assessment of RTW efforts have been reported. None of the countries reported a relation between assessment and use of the ICF model.

In the second part of the study those countries were contacted in which RTW efforts were part of the subject of the assessment, or description of RTW efforts was a prerequisite of the assessment. These countries were Denmark, Finland, Germany, the Netherlands, and Slovenia. Information was gathered regarding three characteristics (Table 1). Information on the situation in the Netherlands had already been gathered. Of the four countries that were contacted, Slovenia did not respond.

In Denmark and the Netherlands the assessor (criterion 4) is a graduate in Social Sciences, called a Social Worker or a Labour Expert, respectively (Table 3). The assessor in Finland and Germany is a Physician, with additional education or specific interest in the field of insurance medicine.

Regarding the information used (criterion 5), in Denmark, the input of the assessment is the information gathered by contact with the employee. Information gathered by contact with the employer and physician (either General Practitioner or Medical Specialist) is optional. In Finland, the input of the assessment consists of notes of the medical advisor/specialist either hired by the company's Occupational Health Service (OHS) or by the employer. These notes include an action plan and an overview of work possibilities of the employee. The Social Insurance Physician can contact a Labour Expert if he/she thinks this is necessary, and can also consult the medical advisor/specialist. In addition, the Social Insurance Physician can contact the employer and the employer's OHS. There is no personal contact with the employee. In Germany, the input of the assessment is based on medical facts, taken from the patient's medical file. If the patient agrees, information from the employer's OHS is also gathered. In the Netherlands, a report is written by the employer and employee for this purpose. The report includes a problem analysis, i.e. a mandatory description of the (dis)abilities of the employee by the Occupational Physician, the plan designed to achieve work resumption (an action plan), and the employee's opinion regarding the RTW process. The assessors have the opportunity to consult a Social Insurance Physician, and can invite the employer and employee to provide more information by phone, letter or face-to-face contact.

The aim of the RTW assessment (criterion 6) in Denmark, focuses on whether the RTW efforts are sufficient, i.e. whether all possible RTW efforts have been undertaken (Table 3). A different perspective is used in Finland, where the aim is to assess whether the level of disability is over two thirds of the working capacity. In Germany, the aim of the assessment focuses on whether there are no more possibilities for rehabilitation. In the Netherlands, the aim of the assessment focuses on whether the efforts are considered sufficient, and if

not, whether the employer can provide solid arguments for not reaching a satisfactory level of RTW.

In Denmark, Finland, Germany and the Netherlands, the application for disability benefits is continued if the outcome is positive (i.e. if the efforts are considered sufficient) (Table 3). If the outcome is negative in Denmark and the Netherlands (i.e. if efforts are insufficient and the employer can not provide solid arguments) the rehabilitation period is extended to a maximum of 52 weeks, whereas both in Finland and Germany a negative outcome results in application for rehabilitation subsidy.

Table 2. Overview of results of the comparison between 13 European countries on criteria 1-3*

European countries	Criteria **		2. prerequisite	3. guidelines
	1. subject			
	a. RTW efforts	b. possibilities		
Belgium	-	-	+	-
Czech Republic	-	+	-	-
Denmark	+	+	+	-
Finland	+	+	-	-
France	-	-	-	-
Germany	+	-	+	-
Ireland	-	-	-	-
Italy	-	-	+	-
Netherlands	+	+	+	+
Norway	+	-	-	-
Slovakia	+	-	-	-
Slovenia	+	-	+	-
Sweden	-	-	-	-

* + = applicable to this country; - = not applicable to this country

** 1a. subject of the assessment: RTW efforts/rehabilitation;

1b. subject of the assessment: possibilities for RTW efforts/rehabilitation;

2. prerequisite criteria in the Netherlands: description of RTW efforts/rehabilitation;

3. availability of guidelines;

Table 3. Characteristics of the assessment of RTW efforts in Denmark, Finland, Germany and the Netherlands on criteria 4-6**

	Countries			
	Denmark	Finland	Germany	Netherlands
Assessor (criterion 4)	Social Worker	Social Insurance Physician	Social Insurance Physician	Labour Expert
Information used (criterion 5)	Information gathered by contact with employee	Notes of medical advisor/specialist	Information from medical file	Report written by employer and employee
Optional information source	- Physician (General Practitioner or Medical Specialist) - Employer	- Labour Expert	- Employer's OHS	- Social Insurance Physician
Aim (criterion 6)	Whether efforts are sufficient	Whether level of disability is over 2/3	Whether there are no possibilities for rehabilitation	Whether efforts are sufficient or if employer can provide solid grounds for lack of RTW/rehabilitation
Consequences				
Positive outcome	Application for disability benefits	Application for disability benefits	Application for disability benefits	Application for disability benefits
Negative outcome	Extension of the rehabilitation period of max. 52 weeks	Application for rehabilitation subsidy	Application for rehabilitation subsidy	Extension of the rehabilitation period of max. 52 weeks

** 4. background of the assessor;

5. information used for the assessment;

6. aim of the assessment.

Discussion

The results show that RTW and assessment of RTW efforts are important subjects in half of the investigated countries. Regarding assessment of RTW efforts, similarities are found between 5 of 13 countries. Nevertheless, countries also differ to a great extent in certain characteristics of the assessment, such as when the assessment for disability benefits takes place (two weeks to no time limit) and consequences of a negative outcome of the assessment of RTW efforts (no consequence to financial sanction). Taking these characteristics into account, we may conclude that the assessment of RTW efforts differs considerably.

As for the subject and prerequisites of the assessment seven countries reported RTW efforts or possibility to RTW as subject. Description of RTW efforts was reported to be a prerequisite for assessment in five other countries. According to results of the taxonomy project, the assessment for disability benefits was found to be relatively identical in most European countries for the medical aspect, but not for the vocational aspect[11]. It might be of utmost importance to include RTW efforts in the assessment for the application for disability benefits. If the necessary RTW efforts have not been undertaken, opportunities to reach an optimal level of RTW can be missed, which can result in unjustified granting of disability benefits. Of course, an assessment which takes place right after the onset of sickness absence can not be considered similar to an assessment which takes place after a longer period.

With regard to the assessor, the main difference in background is type of education. In the Netherlands and Denmark, the assessor has a social background, while in Finland and Germany, the assessor has a medical background. Similarly, the countries differ in the information used for the assessment of RTW efforts. In the Netherlands and Denmark, information about the RTW process is part of the assessment. In contrast, in Finland and Germany the emphasis lies on the medical information, which may explain the difference of educational background. Also, differences are found in using self-report of the employee as a source of information. In the Netherlands and in Denmark this information from the employee is the main source of information, whereas in Finland and Germany the main source of information is the professional involved, such as a medical advisor or a physician. Considering the multifactorial approach necessary to describe RTW[12,16], as the RTW process is influenced by personal, social and economic factors[17,18], using only medical information will not be sufficient to assess the efforts performed in the RTW process. In addition, information from the employee can be used to check the external consistency of the employee's story [16]. On the other hand, information gathered by employee contact can influence the judgement process in a negative way[17].

These differences in assessment characteristics may result in differences in the assessment procedures and outcome. Even if the information used in the assessment is similar, an assessment can differ due to variation in interpretation[5], and number and type of assessor(s)[11]. However, up to now it is not known what the effects of the characteristics mentioned above are on the assessment of RTW efforts. Of course, the best available evidence regarding the subject should be available to make a proper decision[5]. Therefore, future research should focus on the effects of these characteristics on the assessment of RTW efforts.

As for the availability of guidelines or the use of the ICF framework, this study reports that a guideline on assessing RTW efforts is only used in the Netherlands. However, the Dutch guideline does not depend on scientific evidence and therefore does not meet currently accepted methodology criteria as used in some other guidelines in use in the field of RTW. Future guidelines on assessing RTW efforts should consider quality criteria for the development and implementation of guidelines[19]. Lack of guidelines will cause variability across assessors making judgements on the basis of the same info[20,21]. Besides this, no countries report the use of the ICF framework. A framework can be beneficial for combining uncertainties to a coherent choice[10]. Up to now, the assessment of RTW efforts seems to be a relatively subjective matter, and future research should not only focus on providing an evidence-based description of 'sufficient RTW efforts', but also on an evidence-based assessment of the efforts made in the RTW process. Furthermore, it is important to investigate and understand differences in terminology. Using a similar framework and terminology could facilitate communication substantially[22].

Due to differences in the aim of the assessment, including the consequences of a negative outcome, the extent of the effect of insufficient RTW efforts on each stakeholder and on the RTW process differs between European countries. For example, in the Netherlands, the costs for the delayed application for disability benefits are the responsibility of the employer. The financial responsibility of the employer could have an effect on the time to RTW[3].

Most European countries have developed and implemented policies containing elements of income support and integration[1]. All these policies stem from the same principles, but they have been developed more or less independently in each country[12]. To facilitate Europeanization of social policies, and to facilitate quality control of the country's own policies, it is important to know and learn from differences in practices[1].

The strengths of this study lie in the focus on basic characteristics of the assessment of RTW efforts in relation to the application for disability benefits. The results of the study provide information on an international level which can facilitate understanding of similarities and differences. Furthermore, the representatives of the participating countries were contacted through the EUMASS Congress and are therefore considered experts in the field.

The weaknesses of this study go into differences in context which might have caused misinterpretations. In this study, the situation in the Netherlands was chosen as a reference point. This is not considered a gold standard. The characteristics which are subject of this study might not have been chosen if a different country's perspective had been used. Although the choice of aspects may be fairly arbitrary, we are confident that the aspects are relevant according to both literature and experts.

In this study, professionals involved in the assessment for the application for disability benefits were asked for information. As there is very little literature on the subject, and as the assessment itself only seems to be described in Dutch guidelines, the expert's opinions could not be verified by official documents. Nevertheless, the expert's opinion might reflect daily practice more accurately. This confirms the importance of this study, and we hope that the results from this study will reduce future possible misinterpretations in communication on the subject of assessment of RTW efforts. Also, more research is needed to validate the outcome of this study. Of course, if the assessment of RTW efforts is not reported to take place in relation to the application for disability benefits, this could mean that the assessment does not take place at all, or that it is not related to the application for disability benefits. Also, country policies undergo changes constantly[13], as has been the case in Sweden, where all RTW possibilities must have been tried to obtain sickness compensation[23].

Unfortunately, Slovenia did not respond to the second questionnaire. However, the comparison between Denmark, Finland, Germany and the Netherlands already provides a considerable amount of information on possible similarities and differences in the assessment of RTW efforts. Furthermore, this study does not take the consequences of the assessment of RTW efforts into account. Further research is needed to compare the countries in terms of efficacy of the assessments for the application of disability rehabilitation, and assess the influence of contextual factors, such as policy changes and the country's history.

Future research should also focus on the development and application of a common framework, based on the use of the ICF model in the assessment of RTW efforts and the RTW process. The application of a framework might improve communication and learning between countries, especially if this framework is designed and approved by the countries involved, and, most importantly, is able to place the factors relevant to assessment of RTW efforts. Using a framework to describe and evaluate the assessment of RTW efforts could facilitate the development of a more uniform, Europeanized policy. Also, efficacy of not only RTW efforts themselves, but also on assessment of those RTW efforts should be investigated further. A common framework could assist in the development of this research and make it easier for other countries to benefit from this research.

In conclusion, RTW efforts are assessed in half of the participating European countries. By comparing, the characteristics of the assessment of RTW efforts in these European countries show both similarities and differences. The assessment of whether sufficient RTW efforts have been undertaken during the RTW process is of utmost importance, as it will enlarge the chance of a sick-listed employee to RTW. This study may provide suggestive evidence for the relevance of research in the field of RTW efforts. It may facilitate the gathering and exchange of knowledge and experience between countries on the assessment of RTW efforts.

Conflicts of interest

None declared.

Key points

RTW efforts are assessed in half (n=7) of the 13 investigated countries;

Countries differ to a great extent in the assessment of RTW efforts;

Assessing RTW efforts increases chance of RTW;

Using a framework to describe and evaluate the assessment could facilitate the development of a more uniform European public health policy.

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3

Influence of efforts of employer and employee on return-to-work process and outcomes

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Abstract

Background: Research on disability and RTW outcome has led to significant advances in understanding these outcomes, however, limited studies focus on measuring the RTW process. After a prolonged period of sickness absence, the assessment of the RTW process by investigating RTW Effort Sufficiency (RTW-ES) is essential. However, little is known about factors influencing RTW-ES. Also, the comparability of factors determining RTW-ES and RTW is unknown. The purpose of this study was to investigate 1) the strength and relevance of factors related to RTW-ES and RTW (no/ partial RTW), and 2) the comparability of factors associated with RTW-ES and with RTW.

Methods: During 4 months, all assessments of RTW-ES and RTW (no/ partial RTW) among employees applying for disability benefits after 2 years of sickness absence, performed by Labor Experts at 3 Dutch Social Insurance Institute locations, were investigated by means of a questionnaire.

Results: Questionnaires concerning 415 cases were available. Using multiple logistic regression analysis, the only factor related to RTW-ES is a good employer-employee relationship. Factors related to RTW (no/ partial RTW) were found to be high education, no previous periods of complete disability, and a good employer-employee relationship.

Conclusions: Different factors are relevant to RTW-ES and RTW, but the employer-employee relationship is relevant for both. Considering the importance of the assessment of RTW-ES after a prolonged period of sickness absence among employees who are not fully disabled, this knowledge is essential for the assessment of RTW-ES and the RTW process itself.

Key words: Return-to-work; Vocational Rehabilitation; Disability Insurance; Outcome measures; Employer effort

Background

In the past years, policymakers and researchers have focused on early return-to-work (RTW) after sickness absence and on the prevention of long-term sickness absence and permanent disability [1,2]. Long-term absence and work disability are associated with health risks, social isolation and exclusion from the labor market [1,2]. Although research on disability and RTW outcome has led to significant advances in understanding about these outcomes, limited studies focus on measuring aspects of the RTW process - the process that workers go through to reach, or attempt to reach, their goals [3]. Up to date, the focus is commonly placed on simply the act of returning-to-work or applying for a disability pension. However, RTW and work disability can also be described in terms of the type of actions undertaken by workers resuming employment [4].

An instrument to measure the undertaken actions in the RTW process and to evaluate if an agreed upon RTW goal has been reached is of interest of various stakeholders. In several countries the assessment of Return-To-Work Effort Sufficiency (RTW-ES) is part of the evaluation of the RTW process in relation to the application for disability benefits [5]. After the onset of sickness absence, the RTW process takes place. RTW efforts made in the RTW process include all activities undertaken to improve the work ability of the sick-listed employee in the period between onset of sickness absence and the application for disability benefits (see figure 1) [6]. During this RTW process, the RTW efforts are undertaken by employer, employee, and health professionals (e.g. general physician, specialist, and/or occupational physician). The assessment of RTW-ES explores the RTW process from the perspective of the efforts made by both employer and employee. This assessment takes place prior to the assessment of disability benefits, which in the Netherlands takes place after two years of sickness absence [6]. The assessment of RTW-ES and the assessment for disability benefits are performed by the Labor Expert (LE) and a Social Insurance Physician (SIP), respectively, of the Social Insurance Institute (SII).

The RTW efforts are sufficient if the RTW process is designed effectively, the chances of RTW are optimal, and RTW is achieved in accordance with health status and work ability of the sick-listed employee [5,7]. The RTW-ES assessment is performed only when the Dutch employee has not fully returned to work after two years of sickness absence, but does have remaining work ability and is applying for disability benefits. Of employees applying for disability benefits, some apply for partial benefits, and some apply for complete benefits, based mainly on the level of RTW achieved during the RTW process, i.e. no RTW or partial RTW. Little is known about the differences between employees who apply for disability benefits after long-term sickness absence who have achieved partial RTW and those who have not achieved RTW.

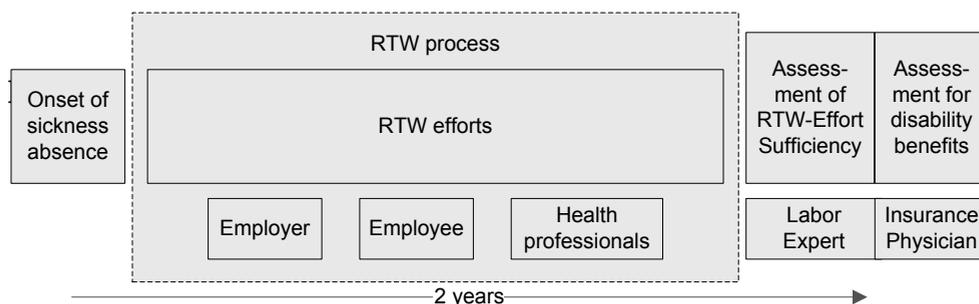


Figure 1. A description of the RTW process in relation to the assessment of Return-To-Work Effort Sufficiency and the assessment for disability benefits

Assessing the sufficiency of the efforts made during the RTW process prior to the application for disability benefits could help prevent unnecessary applications for disability benefits. However, current RTW process outcomes focus mostly on time elapsed or costs [4], and not on the RTW process. Assessing the sufficiency of efforts undertaken during the RTW process might be an important addition to existing RTW outcomes as it could give insight in factors related to RTW in employees on long-term sickness absence who apply for disability benefits [5].

Because the RTW outcome is assessed after a longer period of sickness absence, the influence of the activities undertaken in the RTW process is evident. Knowing the strength and relevance of factors influencing the RTW process can provide vital information for the RTW outcome and the opportunities to achieve better RTW goals in the future. Ultimately, knowing the differences in factors associated to RTW-ES among employees who have not returned to work fully, but do have remaining work ability, might give insight in the differences between factors related to RTW outcome and the factors during the RTW process related to the assessment of RTW-ES. Moreover, the comparability of both outcomes (RTW outcome versus RTW-ES outcome) is unclear. Factors related to RTW among employees on long-term sickness absence and applying for disability benefits might differ from factors relevant to the RTW-ES outcome measured by the activities during the RTW process.

The purpose of this study was to investigate 1) the strength and relevance of factors related to RTW Effort Sufficiency (RTW-ES) and to RTW outcome (no RTW or partial RTW) among employees applying for disability benefits after two years of sickness absence, and 2) the comparability of the factors associated with RTW-ES and RTW.

Methods

Measures

RTW-ES assessment

The RTW-ES assessment focuses on whether enough activities have been undertaken by the employer and employee to realize (partial) RTW after two years of sickness absence. This assessment is based on a case report compiled by the employer. This case report includes a problem analysis, i.e. a mandatory description of the (dis)abilities of the employee by an occupational physician hired by the employer, the plan designed to achieve work resumption (an action plan), and the employee's opinion regarding the RTW process. Records of all interventions, conversations and agreements between the parties involved in the RTW process were also included in the case report. The assessment is performed by LE's from the Dutch SII, who are graduates in social sciences. During the assessment, the LE's have the opportunity to consult an SIP, and can invite the employer and employee to provide more information. When, according to the LE insufficient efforts have been made, the application for disability benefits is delayed, and the employer and/or employee receive a financial sanction, depending on who has omitted to perform the necessary efforts to promote RTW. The assessment of RTW-ES is performed at the discretion of the LE's, no evidence-based protocol or instrument is available. Employees who have returned to work fully and are receiving the original level of income, or who are fully disabled are not assessed. Employees on sickness absence due to pregnancy, or on sickness absence while not under contract fall under a different policy and are not assessed as well.

Research questionnaire

A closed-ended questionnaire was developed to gather information about the two outcomes, RTW and RTW-ES, and personal and external factors related to the case and the RTW process of the employee.

The strength and relevance of factors related to RTW-ES and to RTW outcome (no RTW or partial RTW) were investigated by means of a questionnaire. During the RTW-ES assessment, the LE was asked to fill out the questionnaire.

The content of the questionnaire consists of a list of possible predicting factors of RTW , which were inventorized by literature (e.g. [8-10]). Questions were included about personal factors such as age, gender, level of education (low, medium, high, including examples), and more work-related personal factors such as the reason of sickness absence (i.e. physical, mental or both) and tenure (number of years with current employer). Questions about whether there had been periods of work resumption (yes, no) or periods of complete disability (yes, no) were also included. For the external factors questions were asked about

whether the sickness absence was work-related (yes, both work-related and private, no), whether there had been a conflict between the employer and employee during the RTW process (yes, no), and also whether the quality of the relationship between the employer and employee was deemed good/neutral or bad. A question about whether the employee had returned to work (yes/no) was included, as well as a question about the sufficiency of RTW efforts (sufficient/insufficient) according to the LE. The LE's gathered the information necessary for filling out the questionnaire by examining the case report or interviewing the employer, employee or SIP.

Statistical analyses

Logistic regression analysis was used to assess the independent contribution of factors to the RTW outcome. The method used was backward conditional, because of the explorative nature of the analyses.

Similar to the analyses of RTW, multilevel regression analysis was used to analyze the relationship between the factors and the RTW process outcome in terms of sufficiency of RTW efforts, taking the assessing professional into account. In both multiple analyses, variables were entered in the model when $p < 0.20$ based on the univariate relationships, and were adjusted for age, gender and education level. Data analysis was performed by using SPSS 16.0 for MS Windows.

Comparability

The results of the statistical analyses were used to assess the comparability of the factors associated with RTW-ES and RTW.

Results

Study population

Questionnaires concerning 415 cases were filled out. Of all cases, the average age of the employees was 47 years (SD 9.4), 180 (43%) were male, and education level was low in 20%, medium in 60% and high in 20% (see table 1).

Of the 415 cases, RTW-ES was deemed sufficient in 334 cases (80%) and insufficient in 81 cases (20%). Of the 415 cases, 203 sick-listed employees had returned to work partially prior to applying for disability benefits, whereas 211 sick-listed employees (51%) had not returned to work.

At the moment of application for disability benefits, 191 employees who had returned to work had returned to their own employer (97%), whereas 5 had not (3%). The RTW process was agreed upon by the employee in 329 cases (80%), while 80 employees (20%) did not agree with the proceedings of the 2 years prior to the application for disability benefits.

Table 1. Description of study population

Age M(SD) (N=415)	47.4 (9.4)
Gender N(%) (N=415)	
Male	180 (43.4)
Female	235 (56.6)
Educational level N(%) (N=410)	
Low	84 (20.5)
Medium	246 (60.0)
High	80 (19.5)
RTW N(%) (N=411)	
No (or only on a therapeutic basis)	211 (51.3)
Yes (partially or fully)	200 (48.7)
RTW efforts N (%) (N=415)	
Sufficient	334 (80.5)
Insufficient	81 (19.5)
RTW at own employer (N=196)	
Yes	191 (97.4)
No	5 (2.6)
RTW process agreed on by employee (N=409)	
Yes	329 (80.4)
No	80 (19.6)

Personal and external characteristics

The characteristics of the variables included in the logistic analyses are presented in table 2. Regarding the personal factors, the reason of absence was a physical health condition in 261 cases (63%), mixed health conditions in 67 cases (16%), and a mental health condition in 84 cases (20%). The average tenure was 13 years (SD 8.8). Of the sick-listed employees, 272 (66%) reported periods of complete disability, which meant that no activities to promote RTW could be undertaken during this period. 218 employees (53%) reported periods of work resumption, meaning that they had attempted to RTW during the two years before the application for disability benefits.

For the external factors, the sickness absence was partially or completely work-related in 55 cases (16%). The relationship between the employer and employee was good or neutral in 355 cases (93%). There was evidence of conflict between employer and employee in 32 cases (8%). The correlation between employer-employee relationship and employer-employee conflict was 0.72 ($p < 0.01$).

Table 2. Description of personal and external factors in study population

Personal factors	N (%)
Reason of absence (N=412)	
Physical	261 (63.3)
Both physical and mental	67 (16.3)
Mental	84 (20.4)
Tenure (N=358) (M(SD))	12.84 (8.75)
Periods of complete disability (N=412)	
Yes	272 (66.0)
No	140 (34.0)
Periods of work resumption (N=412)	
Yes	218 (52.9)
No	194 (47.1)
External factors	N (%)
Sickness absence work related (N=339)	
Yes, completely/partially	55 (16.2)
No	284 (83.8)
Relationship employer employee (N=380)	
Good/neutral	355 (93.4)
Bad	25 (6.6)
Conflict (N=410)	
Yes	32 (7.8)
No	378 (92.2)

RTW-ES and RTW

Factors related to RTW-ES are shown in table 3. The multilevel regression analysis shows five potential determinants ($P < 0.20$) of RTW-ES, while taking assessor into account: reason of absence, tenure, work-relatedness of absence, employer-employee relationship, and employer-employee conflict.

Using multiple multilevel logistic regression analysis, adjusting for age, gender and education and excluding conflict, one factor remained in the model. Only employer-employee relationship had a significant relationship to a higher chance of RTW-ES (OR 5.47, 95%CI 2.00-14.98, $P < 0.01$).

Table 3. Factors related to RTW-ES: multilevel logistic regression analyses, taking assessor into account ^a

Variable (reference group)	Crude odds ratios		OR adjusted for age, gender, and education ^{a,a}	
	OR (95%)	P	OR (95%)	P
Personal factors				
Age (years)	1.00 (0.97-1.03)	0.93	0.99 (0.95-1.03)	0.65
Gender (female)	1.07 (0.68-1.71)	0.76	0.97 (0.51-1.85)	0.92
Education (low)	1.02 (0.43-2.41)	0.97	1.08 (0.35-3.32)	0.89
Reason of absence (mental) ¹	1.97 (1.14-3.42)	0.02	1.22 (0.57-2.61)	0.60
Tenure (years)	1.03 (0.99-1.06)	0.14	1.03 (0.98-1.01)	0.23
Periods of complete disability (no)	1.19 (0.75-1.89)	0.45	-	-
Periods of work resumption (no)	1.22 (0.76-1.95)	0.42	-	-
External factors				
Sickness absence work related (yes) ²	2.73 (1.33-5.62)	0.01	1.44 (0.64-3.22)	0.38
Relationship employer/employee (poor)	5.91 (2.81-12.43)	<0.01	5.47 (2.00-14.98)	<0.01
Conflict (yes) ³	4.25 (2.14-8.43)	<0.01	-	-

^a OR of >1 indicates a higher chance of RTW-ES, compared to the reference group

^{a,a} QIC=265.92, N=269

¹ Physical, both physical and mental, mental

² No, partial/yes

³ ******* r=0.72 with variable ‘relationship employer/employee’; not included in multiple regression

Factors related to RTW according to the regression analysis are presented in table 4. In the univariate regression analyses five potential determinants were associated (P<0.20) to RTW: education level, tenure, periods of complete disability, relationship between employer and employee, and employer-employee conflict. Conflict was excluded from the model because of the high correlation to employer-employee relationship, and the model was adjusted for age, gender and education. Using multiple backward conditional logistic regression analysis, three factors remained in the model: employer-employee relationship (OR 14.59, 95%CI 3.29-64.71, P=<0.01), level of education (OR 2.89, 95%CI 1.39-6.00, P=<0.01), and periods of complete disability (OR 1.92, 95%CI 1.18-3.15, P=<0.01).

Table 4. Factors related to RTW: logistic regression analyses ^a

Variable (reference group)	Crude odds ratios		OR, adjusted for age, gender and education ^{aa}	
	OR (95%)	P	OR (95%)	P
Personal factors				
Age (years)	1.00 (0.98-0.02)	0.97	1.00 (0.97-1.02)	0.68
Gender (male)	1.01 (0.68-1.49)	0.97	0.98 (0.62-1.53)	0.92
Education (low)	1.99 (1.07-3.70)	0.03	2.89 (1.39-6.00)	<0.01
Reason of absence (mental) ¹	1.08 (0.57-2.07)	0.81	-	-
Tenure (years)	1.02 (0.99-1.04)	0.18	1.01 (0.98-1.04)	0.47
Periods of complete disability (yes)	1.74 (1.15-2.63)	0.01	1.92 (1.18-3.15)	<0.01
Periods of work resumption (yes)	1.16 (0.79-1.71)	0.45	-	-
External factors				
Sickness absence work related (yes) ²	1.35 (0.75-2.41)	0.32	-	-
Relationship employer/employee (poor)	12.95 (3.01-55.74)	<0.01	14.59 (3.29-64.71)	<0.01
Conflict (yes) ³	5.57 (2.10-14.78)	<0.01	-	-

^a OR of >1 indicates a higher chance of RTW, compared to the reference group

^{aa} R²=135, N=321

¹ Physical, both physical and mental, mental

² No, both work related and private, yes

³ r=0.72 with variable 'relationship employer/employee'; not included in multiple regression analysis

Discussion

In this study, the only factor related to RTW-ES is a good relationship between employer and employee. Factors related to RTW outcome (no RTW or partial RTW) after two years of sickness absence were found to be high education, no previous periods of complete disability and a good relationship between employer and employee.

Included in this study were employees applying for disability after two years of sickness absence, who were not permanently or fully disabled. Sickness absence duration should be taken into account because the phase-specificity of sickness absence is different after two years of sickness absence, and other factors are related to RTW outcome [11]. Furthermore, in this study a comparison was made between employees who had achieved some RTW, and those who did not achieve RTW. Previous studies have focused on measuring RTW earlier than after two years, and also a distinction was made between RTW and no RTW, regardless of work ability or application for disability benefits. This could explain differences in factors related to RTW found in previous research and the results of this study.

The results found on factors related to RTW-ES can not be compared to previous studies because of lack of research on this subject.

The relation found in this study between education and RTW is congruent with existing literature. A lower education prolongs the time to RTW [12,13]. A poor relationship between employer and employee is found to have a negative effect on RTW [14]. Moreover, supervisor support increases the chance of RTW [6,15,16]. Previous research has found that age, gender and tenure are related to RTW. A higher age (>50 years) prolongs the time to RTW [14,17]. Female gender decreases the chance of RTW [17], but this evidence is not conclusive [14]. A shorter tenure prolongs the time to RTW [6,14], and a tenure longer than one [18] or two years [19] increases the chance of RTW. In our sample, age, gender and tenure were not found to be related to RTW. Furthermore, in this study, no relationship was found between RTW and mental health conditions as the reason of sickness absence or the work-relatedness of the sickness absence. This is also unlike the results found in previous studies, where it has been found that mental health conditions reduce the chance of RTW [20,21]. Also, if the sickness absence is work-related, for example due to a work-related accident, this reduces the chance to RTW [22]. Furthermore, in this study, periods of work resumption were not associated to RTW.

As far as comparability of RTW-ES and RTW outcome is concerned, only the relationship between employer and employee is a shared relevant factor. Educational level and periods of previous disability are only predictors of RTW, but not of RTW-ES. This suggests that the two outcomes have limited comparability, but also that the relationship between employer and employee could be considered a very relevant factor in cases of prolonged sickness absence.

The strength of this study lies in its subject; this study is the first to investigate determinants of RTW-ES, and to compare the findings to the RTW outcome (no RTW or partial RTW). Also, this study focuses on the comparison of no RTW to partial RTW after two years of sickness absence. The RTW efforts are mostly of interest when the employee still has work ability, but has not yet returned to their original work fully after a prolonged period of sickness absence.

A limitation in this study is the lack of knowledge on the level of disability of the employee. It was investigated whether there had been drastic changes, such as a period of complete disability or periods of work resumption, but the RTW outcome could not be compared to the level of disability according to the physician. However, we do know that the physicians of the OHS and the SII ensure that the assessment of RTW-ES after two years does not include employees who are fully disabled or who have no disability at all.

Another limitation issue lies in the measurement of the determinants. Questionnaires were developed in which a certain set of variables were investigated. A different selection could

have lead to different results. However, the variables were selected by means of literature and expert meetings, and we feel we have investigated several of the most relevant factors. The questionnaire and the sources used to complete the questionnaire could be a source of response bias. As far as the outcome is concerned, the assessment of RTW-ES is performed by Dutch SII LE's, who have had similar training [5]. To avoid assessor bias, the assessor was taken into account when analyzing RTW-ES. However, it could be that a different group (e.g. from another country) would perform the assessment in their own way, thereby including other factors. On the other hand, this study provides a great opportunity to compare these results to a different situation, as this is the first study to investigate RTW-ES and to compare it to RTW after two years.

The relevance of this study lies in the use of RTW-ES as RTW outcome. RTW-ES is relevant to the process, especially when investigating RTW after a longer period of time in cases where the employee is expected to be able to RTW, but not fully or in the original setting. According to the findings of this study, the relationship between employer and employee is very important to both RTW and RTW-ES. This would implicate a shift from a more physical approach or a focus on the personal factors to a work-related external factor such as the relationship between employer and employee. The importance of this factor is considerable, because effective job accommodation for employees with a chronic disability is a process in which external (i.e. social) factors are essential [23]. During the RTW process, these factors are not only of great importance, but can also be influenced, in contrast to factors such as level of education and periods of complete disability. Issues regarding the relationship can be detected by external parties such as the physician or vocational rehabilitation expert, an can be improved by mediation or counseling.

This is the first study performed to investigate the factors related to RTW-ES and to compare these to factors related to RTW. In future research this study could be replicated while changing a study characteristic to determine its influence on the study outcome. For example, a different group of professionals (e.g. from another country), or different factors could be included. Also, it would be interesting to investigate RTW and RTW-ES by comparing to full RTW. However, this could also cause difficulties in research design, as full RTW in the previous work already implies RTW-ES. Moreover, full RTW is usually achieved earlier. An alternative could be to research determinants of RTW at both six months and two years, as to be able to compare the determinants of full or partial RTW.

In conclusion, this study showed that RTW-ES is largely determined by the relationship between employer and employee. Factors related to RTW after two years of sickness absence are educational level, periods of complete disability and also the relationship

between employer and employee. It can be concluded that RTW-ES and RTW are different outcomes, but that the relationship between employer and employee are relevant for both outcomes. Considering the importance of the assessment of RTW-ES after a prolonged period of sickness absence among employees who are not fully disabled, this knowledge is essential for the assessment of RTW-ES and the RTW process itself.

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4

Identifying factors relevant in the assessment of return-to-work efforts in employees on long-term sickness absence due to chronic low back pain: a focus group study

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Abstract

Background: Efforts undertaken during the return to work (RTW) process need to be sufficient to prevent unnecessary applications for disability benefits. The purpose of this study was to identify factors relevant to RTW Effort Sufficiency (RTW-ES) in cases of sick-listed employees with chronic low back pain (CLBP).

Methods: Using focus groups consisting of Labor Experts (LE's) working at the Dutch Social Insurance Institute, arguments and underlying grounds relevant to the assessment of RTW-ES were investigated. Factors were collected and categorized using the International Classification of Functioning, Disability and Health (ICF model).

Results: Two focus groups yielded 19 factors, of which 12 are categorized in the ICF model under activities (e.g. functional capacity) and in the personal (e.g. age, tenure) and environmental domain (e.g. employer-employee relationship). The remaining 7 factors are categorized under intervention, job accommodation and measures.

Conclusions: This focus group study shows that 19 factors may be relevant to RTW-ES in sick-listed employees with CLBP. Providing these results to professionals assessing RTW-ES might contribute to a more transparent and systematic approach. Considering the importance of the quality of the RTW process, optimizing the RTW-ES assessment is essential.

Background

Chronic low back pain (CLBP) is an important cause of work disability and sickness absence [1,2]. In European countries, up to 35% of work disability is caused by CLBP [2]. In the Netherlands, the total costs of disability because of back pain were estimated at 1361 million Euros in 2007, which comprises a proportion of 38.5% of the total costs of back pain [3]. An effective return to work (RTW) process is essential to prevent applications for disability benefits due to chronic disability [4,5]. With the high number of disabled workers, the outcome and content of this RTW process are important issues [5-8]. Although the assessment of the RTW process is part of the application of disability benefits in several countries (i.e. Denmark, Germany, the Netherlands, Norway) [8], few studies focus on this assessment or on the factors relevant to the quality assessment of the RTW process [4,5].

The RTW process can be assessed by means of the assessment of RTW Effort Sufficiency (RTW-ES), as part of the evaluation of the RTW process in relation to the application for disability benefits [8]. RTW efforts made in the RTW process include all activities undertaken by employee, employer or health professionals involved in the RTW process to improve the work ability of the sick-listed employee in the period between onset of sickness absence and the application for disability benefits [9]. The perspective of this assessment is that if the RTW process is designed effectively and the RTW efforts are sufficient, the chances of RTW have been tested in an optimal way, and RTW should be achieved in accordance with health status and work ability of the sick-listed employee [10]. The assessment of RTW-ES investigates the quality of the RTW process. Assessing RTW-ES is of importance when considering the remaining functional possibilities of the employee and determining future RTW opportunities.

In the Netherlands, this assessment takes place prior to the assessment of functional and earning capacity (i.e. the income that would be generated if the individual would be employed to full functional capacity) as part of the disability evaluation, after two years of sickness absence [9]. The RTW-ES assessment is performed only when the Dutch employee has not fully returned to work after two years of sickness absence, but does have remaining work ability and is applying for disability benefits. If the RTW efforts are not considered sufficient, the application for disability benefits can be delayed to make sure that the necessary efforts can still be undertaken. This is similar to the consequences in other countries, where the rehabilitation period is extended (i.e. Denmark) or a rehabilitation subsidy is applied for (i.e. Finland, Germany) [8]. The assessment is based on a reintegration report, which is written by both employer and employee. The reintegration report includes a problem analysis, i.e. a mandatory description of the (dis)abilities of the employee made by an Occupational Physician (OP) of the Occupational Health Service (OHS) hired by the employer, an action plan, i.e. the plan designed to achieve work resumption, and the employee's opinion

regarding the RTW process. Records of all interventions, intermittent RTW process advice by independent professionals, and agreements between employer and employee are also required in the reintegration report [8,9,11].

The assessment of RTW-ES in the Netherlands is performed by Labor Experts (LE's) of the Dutch Social Insurance Institute (SII). LE's are specialized in the field of vocational rehabilitation and after graduating, have followed a one to two year intensive postacademic in-company training. LE's assess whether all opportunities for RTW have been examined and undertaken by the employee or employer, if applicable. The LE's also focus on the context of the RTW process, i.e. factors which might influence the RTW process and its quality, like the relationship between employer and employee, and the employee's attitude. The LE's consider only the non-medical aspects of the RTW process, but they can consult a Social Insurance Physician (SIP) about the medical aspects of the RTW process, e.g. medical interventions and medical prospects. If necessary, the LE's can consult the employee, employer or OP to gather or verify information.

If the efforts made during the RTW process are considered insufficient by the LE, the direct and indirect consequences can be serious [8]. A direct consequence of insufficient efforts is that the application for disability benefits is delayed for a maximum of one year, or until the employer and/or employee have undertaken the necessary actions. A more indirect consequence is that insufficient efforts are an indication that the time to RTW of the employee has been unnecessarily prolonged. In 2010, LE's of the Dutch SII's were responsible for over 27,000 RTW-ES assessments [12].

Over the last years protocols and guidelines have been developed for professionals to improve the quality and standardize their decision-making process [13-15]. These protocols are systematically developed and contain recommendations based on evidence from published literature. In current practice, for LE's, only a protocol is available which focuses mainly on procedural matters [8], and its contents have not been gathered by means of scientific evidence. Moreover, it does not provide a set of factors relevant in the RTW-ES assessment based on scientific evidence. Gathering information about the relevant factors in the assessment of RTW-ES by means of research and including this kind of evidence-based information in the existing protocol will optimize not only the transparency and reliability but also the validity of the assessment [13].

The quality and effect of the RTW process on RTW outcome is influenced by a large number of factors [1,7,16], which makes the operationalization of 'sufficiency of RTW efforts' and the quality assessment of the RTW process a unique challenge. The assessment of RTW-ES is a complex decision-making process, in which relevant factors are regarded implicitly [8]. Knowing which factors are related to RTW-ES is essential, but no guidelines as to which factors are relevant to the decision are available in the Netherlands or in other countries. Literature concerning factors relevant to the assessment of RTW-ES is scarce [8]. Also, it is of

interest to know whether factors relevant to the assessment of RTW-ES can be fitted within the model of Functioning, Disability and Health (ICF model) [17]. By analyzing our results within the ICF model we aim to use a comprehensive framework. Using this well-known categorization system also facilitates the connection to existing and future literature. This way, our approach could help to improve comparability.

A possible source of information about factors relevant to the assessment of RTW-ES is the implicit knowledge of the professionals performing the assessment. Focus group research is a suitable method to gather information on a decision process which is otherwise performed implicitly by professionals [18,19]. The focus group process aims to explore and clarify individual and shared perspectives [18,20,21]. This is particularly effective in complex processes [21], such as the assessment of RTW-ES. The method to unravel the assessment is to gather arguments for the assessment outcome in a standardized setting, and to identify the underlying grounds, thereby making the knowledge and experience of the professionals more explicit [18,19,22]. These underlying grounds are necessary to understand the translation of gathered information into arguments used for the decision, a different conclusion of professionals may arise in identical cases because different grounds are being referred to [19,23].

The main aim of this study was to identify the factors relevant to RTW-ES by means of focus groups, by investigating arguments and underlying grounds relevant to the assessment of RTW-ES in cases of sick-listed employees with CLBP, and to categorize these factors within the ICF model.

Methods

Focus groups

The focus groups consisted of LE's working at the SII in the Netherlands, and we aimed at bringing together two focus groups of 5–8 LE's. A minimum of five LE's in each group is necessary to ensure response diversity, and a maximum of eight LE's to facilitate discussion later in the focus group process. A total of 32 LE's were contacted by SII staff members, 16 from SII's in the northern region, 16 from SII's in the central region of the Netherlands. LE's were selected by the staff members for their expertise in the assessment of RTW-ES, and to include members of all SII offices of the region. If they agreed, the researcher (AM) contacted them and explained the study, and asked for their participation. Each focus group had two meetings, where two cases of RTW-ES were introduced. Both focus groups assessed a different case. The results from the second focus group were used to confirm and add to the findings of the first focus group. The procedure will be described in detail below (see also Figure 1).

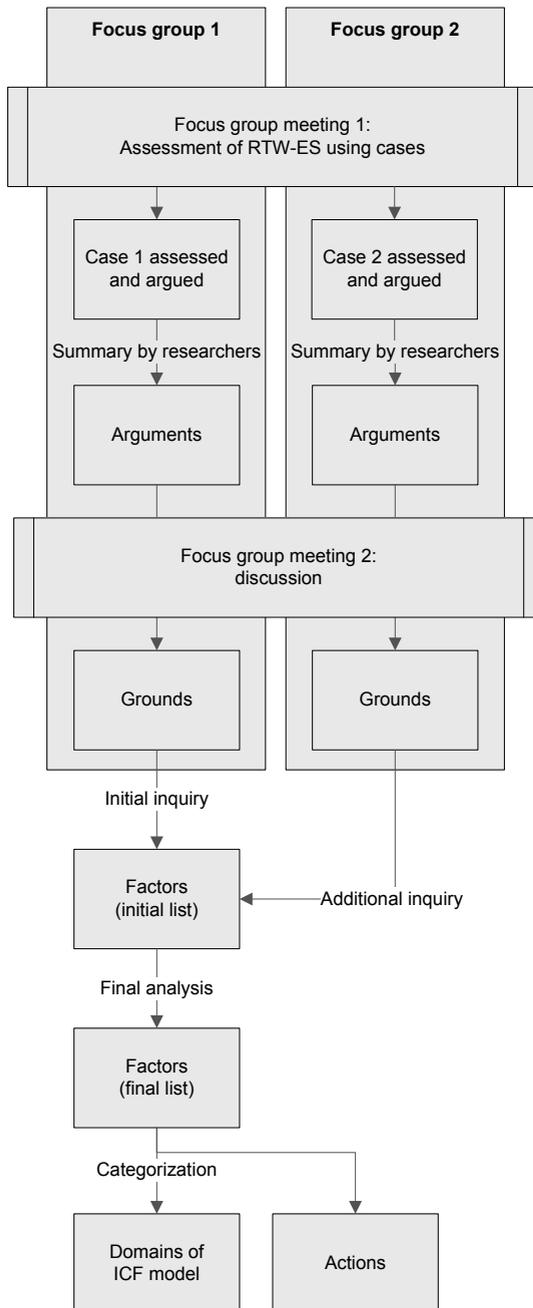


Figure 1: Overview of procedure to make factors relevant to Return-to-work Effort Sufficiency explicit by means of focus groups

Cases

The cases were selected by two of the authors (AM and SB), with the help of five LE's. These LE's acted as an expert group and did not participate in the focus groups. The two cases were selected to reflect two realistic situations on the basis of a well-defined RTW process and outcome, resemblance to daily practice for the assessors, and sufficiency of the information in the reintegration report. The cases represented employees on sickness absence for two years due to CLBP. The employees had not returned to work fully, showed no comorbidity (e.g. other diseases causing or prolonging the sickness absence), and had been available for RTW interventions (e.g. had not been institutionalized for a prolonged period of time). The first case was about a 50-year-old female with secondary vocational education, working in healthcare. The employee had been working in a large company as a facility management worker. The work ability assessment by the occupational physician revealed that the employee was no longer suitable for her original job, and that she had a restriction in working hours (a maximum of 26 h a week, and no evenings or nights). There was no chance of improvement in work ability. The company could not offer any suitable work, except for a temporary job. There had been a medical exam, but no RTW expert or agency had been put into action. Furthermore, there was a conflict between employer and employee, originating from a disagreement about each other's efforts.

The second case was about a 56-year-old male with secondary vocational education, working in public transportation. The work ability assessment by the occupational physician revealed that the employee could not return to his own work fully, but could return to other (more suitable) work fully. The employer could not offer a full-time suitable job, but could offer a combination of suitable tasks, allowing the employee to RTW fully. The employee, however, insisted on returning to his own work, resulting in a partial RTW only. The employer had consulted experts from the SII, which advised a professional approach concerning CLBP interventions. These interventions did not take place.

Assessment

First focus group meeting – collecting the arguments

During the first meeting, a group of LE's was asked to assess individually the RTW efforts in the case presented. The procedure used matched the standard procedure at the Dutch SII, in which the LE receives the report made in the RTW process and the instruction to assess the RTW efforts. During the assessment, the LE's had access to their usual sources of information (e.g. legislation, guidelines, etc.). They were not allowed to consult each other or other LE colleagues. The LE's were given the opportunity to contact a fictitious employee, employer, physician of the OHS, and a physician of the SII. These roles were all performed

by LE's, who had prepared their roles and had contacted physicians for advice and further information if they played the role of physician. This standard procedure closely resembles the standard procedure used in the Dutch SII's when assessing RTW-ES.

In addition, the LE's received a clear instruction on the procedures of the day, and were asked to answer two questions. The questions were aimed at gathering information about 1) arguments used for deciding about the sufficiency of the RTW efforts, and 2) the decision outcome (sufficiency of RTW efforts). In order to analyze the data gathered per case, the authors (AM and SB) made an inventory of the arguments mentioned by the LE's, and also gathered information about who mentioned each argument. In order to collect the underlying grounds behind the arguments, a second meeting took place.

Second meeting – collecting the underlying grounds

During the second meeting, the LE's were invited to participate in a discussion session. This meeting took about four hours, and was chaired by a (senior) LE, with assistance of two of the authors (AM and SB). During the meeting, the participants were asked to explain why their arguments are relevant to the assessment of RTW efforts, thereby revealing the underlying ground of the argument. The ground is the underlying reason for mentioning the argument, and will make knowledge and experience more explicit. The other participants were asked if they agreed with each ground provided, and were then asked to provide other grounds if available. The grounds were discussed and altered if necessary until all focus group members agreed.

The researchers analyzed the grounds produced in the first focus group and collected factors from these grounds. All the words mentioned in the grounds have been considered, thereby collecting aspects relevant to the assessment of RTW-ES. Next, the grounds from the second focus group were analyzed to confirm factors found in the first focus group and identify additional factors. Finally, the authors (AM and SB) discussed all factors with each other in order to identify universal phrasing and correspondence between the factors. If different terms were used to describe the same factor, the terms would be combined (i.e. 'limitations in terms of hours', 'severity of limitations' and 'energy' were all filed under 'functional capacity'). If AM and SB did not agree on the phrasing, other authors (JHBG and JWG) were consulted.

The factors were then categorized in accordance with the International Classification of Functioning, Disability and Health (ICF) model (WHO), into five domains of the assessment: 1) functions 2) activities, 3) participation, 4) personal, and 5) environmental [17].

Ethics and consent

According to the Dutch Medical Research Involving Human Subjects Act (WMO), approval is not necessary for this focus group study. The professionals' opinions were collected with

their consent, without any requirement to follow altered rules of behavior. No real patients were involved in the study, and the anonymized, altered cases used in this study were made available by the SII [24].

Results

The first focus group consisted of eight LE's, of which seven attended both meetings. The second focus group consisted of seven LE's, of which five attended both meetings. The reasons for absence were a pre-existing appointment in one case, and illness in two cases. Seven out of twelve LE's were male, and the LE's had between two and six years of experience in assessing RTW-ES.

Arguments and grounds

During the first meeting, the members of the first focus groups each assessed the case assigned to their focus group. The authors (AM and SB) summarized 42 arguments. An example of such an argument is 'a reorganization has taken place', which was mentioned by three LE's. During the second meeting, these three LE's were asked to elaborate on the underlying grounds, which was in this case 'a reorganization limits the availability of work'. The other focus group members were asked if they agreed with the ground, and if not, to alter the ground to achieve agreement. The final ground in this case was 'a reorganization might limit the availability of suitable work'. In this manner 48 underlying grounds were collected. The members of the second focus group provided 28 arguments in total, from which 38 underlying grounds were collected. Consensus was reached on all grounds.

In order to collect factors relevant to RTW-ES, the authors (AM and SB) analyzed the grounds gathered in the first focus group. This initial inquiry produced 46 factors, in which considerable overlap was present. For example, 'limitations in terms of hours', 'severity of limitations' and 'energy' were all filed under 'functional capacity'. Investigation of the grounds provided by the second focus group provided an additional 12 factors. These 58 factors were taken into consideration when performing the final analysis. This final analysis yielded 19 factors, of which 12 could be filed under regular domains of the ICF model (activities, personal and environmental domain) (see Figure 2). Seven factors are technically actions, and could not be fitted in the ICF model. An example of this is 'training', which is related to the assessment of RTW-ES, but has an impact on the domain of personal factors (e.g. educational level, competencies), and environmental factors (e.g. job availability). In our categorization, 'training' is not considered in terms of available services, but in terms of an actual intervention performed and supported by the stakeholders, which might have an effect on several factors related to RTW-ES. Nineteen factors are described below in relation to the ICF model, including examples of grounds mentioned in relation to these factors (see also Table 1).

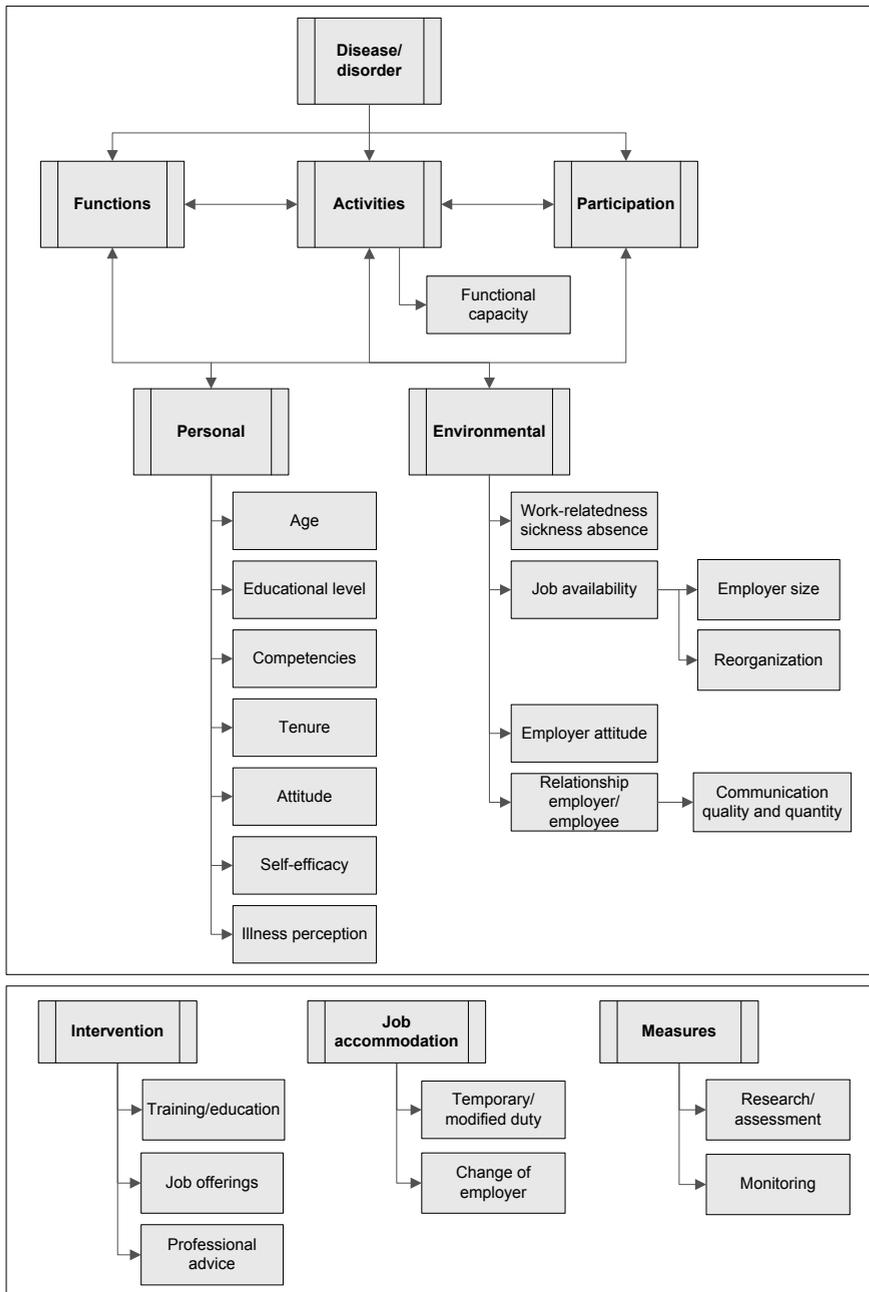


Figure 2. Factors relevant to Return-to-work Effort Sufficiency according to focus groups, in relation to the International Classification of Functioning, Disability and Health (ICF) model

Table 1. Examples of grounds for factors relevant to RTW-ES according to focus groups

Factor	Ground example
ICF domains	
Activities	
Functional capacity	"The type and severity of limitations determine the suitability for work"
Personal	
Age	"As the age of the employee increases, the chances of RTW with a different employer decreases"
Educational level	"The educational level is an indicator of the possibilities to RTW"
Competencies	"The competencies of an employee are important because of job availability"
Tenure	"The longer the tenure, the more can be expected of the current employer"
Attitude	"A positive attitude of the employee has a positive influence on RTW"
Self-efficacy	"A low self-efficacy increases the chance of non-RTW"
Illness perception	"A difference between limitations which are experienced and work ability hinders RTW"
Environmental	
Work-relatedness of sickness absence	"If the sickness absence is caused by work, the employer's obligations towards the employee increase"
Job availability	"The number of available jobs determines the chance of RTW"
<i>Employer size</i>	"The larger the company size, the more opportunities for the employee to RTW"
<i>Reorganization</i>	"A reorganization is at the cost of the number of available jobs and the chance of RTW"
Employer's attitude	"A positive attitude of the employer towards RTW opportunities increases RTW"
Relationship employer/employee	"The relationship between employer and employee determines the readiness of the employee to cooperate with the RTW process"
<i>Communication quality and quantity</i>	"A good communication between employer and employee increases the chance of RTW"
Actions	
Intervention	
Training/education	"The employer should consider requests for training by the employee"
Job offerings	"The chance of RTW is increased by job offerings of the employer"
Professional advice	"Advice of a professional can be helpful if the progress in the RTW process is slower than expected"
Job accommodation	
Temporary/modified duty	"Sustained, durable work is preferred over temporary work"
Change of employer	"If RTW with the current employer is not likely, RTW with a different employer should be investigated"
Measures	
Assessment	"The employer should investigate the availability of suitable work within the company"
Monitoring	"The progress of the RTW process should be monitored by the employer"

Activities

Functional capacity

Related to the category 'activities' of the ICF model is 'functional capacity'. The focus group participants stated that functional capacity is relevant to the assessment of RTW-ES, in that it determines which activities the employee can undertake and which opportunities for participation are remaining. Functional capacity refers to the capability of performing tasks and activities [14]. Examples of grounds mentioned in relation to functional capacity are "The type and severity of limitations determine the suitability for work", "The limitations indicate whether the original job is no longer suitable" and, "The limitations determine the chance of RTW".

Personal domain

In relation to the personal domain of the ICF model, seven factors have been found, which are described in detail below.

Age

Age is a relevant factor of the assessment of RTW-ES. The LE's stated that "As the age of the employee increases, the chances of RTW with a different employer decreases".

Educational level

Also important to the assessment of RTW-ES is educational level, because "The educational level is an indicator of the possibilities to RTW".

Competencies

The competencies of the employee are relevant to the assessment of RTW-ES ("The competencies of an employee are relevant to RTW").

Tenure

The tenure of the employee, or the number of years employed by the current employer, is mentioned as a relevant factor to RTW-ES ("The longer the tenure, the more can be expected of the current employer").

Attitude

Also mentioned is the attitude of the employee, the employee's like or dislike towards an aspect (e.g. RTW goal, activity, capacity). This attitude plays an important role in the effectivity of the RTW process and an optimal outcome. A ground mentioned is "A positive attitude of the employee has a positive influence on RTW", and "The attitude of the employee towards RTW should be positive to promote RTW".

Self-efficacy

Self-efficacy is about the employee's beliefs about his or her capability to produce effects (e.g. perform a certain behavior or reach a certain goal) [25]. This factor is mentioned by the LE's as relevant to RTW-ES: "A low self-efficacy increases the chance of non-RTW", and "Not working while having work ability decreases the self-efficacy of the employee".

Illness perception

is relevant to RTW-ES as the perception of the employee towards the disability and the consequences: "A difference between limitations which are experienced and work ability hinders RTW".

Environmental domain

Four factors are filed under the environmental domain of the ICF model, and are described below.

Work-relatedness of sickness absence

A factor relevant to the assessment of RTW-ES mentioned by the focus group attendees was whether the sickness absence was work-related. LE's stated: "If the sickness absence is caused by work, the employer's obligations towards the employee increase".

Job availability

Also relevant to RTW-ES is job availability, whether suitable jobs are available to the employee with regard to the employee's work ability. A ground mentioned in relation to job availability is for example "The number of available jobs determines the chance of RTW". Specifically mentioned as relevant to job availability are employer size ("The larger the company size, the more opportunities there are for the employee to RTW"), and reorganization ("A reorganization is at the expense of the number of available jobs and the chance of RTW").

Employer's attitude

The attitude of the employer as relevant to the assessment of RTW-ES ("A positive attitude of the employer towards RTW opportunities increases RTW").

Relationship employer/employee

Also relevant to the assessment of RTW-ES is the relationship between employer and employee (or supervisor and employee). This influences the attitude of both employer and employee, and plays an important role in the RTW process and because of that in the assessment of RTW-ES. LE's stated that "The relationship between employer and employee determines the readiness of the employee to cooperate with the RTW process", and

“The work-related relationships determine the chances of RTW”. A factor related to the relationship between employer and employee is communication. The quality and quantity of communication between employer and employee is relevant to RTW-ES. The ground related to this factor is “A good communication between employer and employee increases the chance of RTW”.

Actions

The seven factors which could not be filed in the ICF model are factors which describe actions rather than a situation. These factors are categorized under interventions, job accommodation and measures.

Interventions

Actions relevant to the assessment of RTW-ES and categorized under interventions are training/education, job offerings and professional advice.

Training/education

Whether training or education is facilitated by the employer is relevant to RTW-ES. Grounds mentioned were: “The employer should consider requests for training by the employee”, and “If the employer can offer work after a short training, both the training and the work should be offered”.

Job offerings

Relevant to RTW-ES is whether the employer offers available jobs to the sick-listed employee. Grounds are for example: “The chance of RTW is increased by job offerings of the employer”, and “If a suitable job is available, this job should be offered”.

Professional advice

Requesting and following professional advice is an important factor in RTW-ES. Relevant grounds are: “Ignoring professional advice can have a negative influence on RTW outcome”, and “Professional advice can be requested if there are any doubts on the prognosis of the employee”.

Job accommodation

Factors relevant to the assessment of RTW-ES and related to job accommodation are temporary/modified duty, and the focus on a change of employer.

Temporary/modified duty

Facilitating and accepting temporary or modified duty is relevant to the assessment of RTW-ES. Grounds mentioned in relation to temporary or modified duty are “Sustained, durable work is preferred over temporary work”, and “The employer should offer modified work to the sick-listed employee”.

Change of employer

Also relevant to the assessment of RTW-ES is whether a change of employer is investigated and facilitated: “If RTW with the current employer is not likely, RTW with a different employer should be investigated”, and “If the chances of RTW with a different employer are small, the RTW process should emphasize on RTW with the original employer”.

Measures

Measures are defined as ways to gather information related to the RTW process. Actions related to measures which are relevant to RTW-ES are monitoring, and assessment.

Monitoring

Monitoring or guidance is an important effort and relevant to the assessment of RTW-ES. “The monitoring of the progress of the employee should be sufficient to achieve optimal RTW”, and “Monitoring can prevent stagnation of the RTW process”.

Assessment

An important factor is doing assessments. These assessments can for example be focused on assessing the abilities of the employee, the suitability of the available jobs the workplace: “Assessment of the work ability of the employee is essential to determining the RTW process”, and “The employer should investigate the availability of suitable work”.

Discussion

Nineteen factors related to RTW-ES were identified after analyzing arguments and grounds of LE's derived from two CLBP cases. Twelve of these 19 factors can be fitted within a single domain of the ICF model. The factor functional capacity is related to ‘activities’. Factors in the personal domain related to RTW-ES include age, educational level, competencies, tenure, attitude, self-efficacy and illness perception. Factors in the environmental domain related to RTW-ES are work-relatedness of the sickness absence, job availability, the relation between employer and employee, and employer's attitude. The remaining seven factors can not be fitted within the ICF model. These factors are categorized under intervention (i.e. training/education, job offerings, professional advice), job accommodation (i.e. temporary/modified duty, change of employer), and measures (i.e. assessment, monitoring).

To compare our results with other studies with regard to generalization, no literature about the relation between factors found in research on RTW and factors related to the assessment of RTW-ES was available [4]. We decided to compare the factors found in this study to the existing literature on factors related to RTW to investigate consistencies and differences between the factors related to these outcomes.

The 19 factors found to be relevant to RTW-ES in CLBP patients in this study are mostly consistent with literature on RTW. For example, the relation between a higher age, educational level and attitude of the employee and RTW has also been found in literature [26,27], however, the interpretation and direction of the relevant factor can be different when considering RTW-ES. Literature concerning RTW in patients with CLBP states that the remaining functional capacity is strongly related to RTW after sickness absence [27]. It can be assumed that this is also a reason to take functional capacity into account when assessing RTW-ES. Fewer efforts can be undertaken when an employee with limited capacity is involved. If the employee has limited remaining capacity, efforts to RTW could be considered less useful. Nevertheless, it can also be assumed that more efforts should be undertaken to promote RTW of employees with limited functional capacity, as it will be harder for them to RTW. Another example is the effort of offering temporary or modified work. Research on RTW in CLBP has found that RTW increases the well-being of the sick-listed employee [16], and that temporary work shortens the time to RTW [28,29]. Literature has also shown that the lack of modified work is related to the transition from acute to chronic LBP [30], and the availability of modified work might therefore be relevant when the effort sufficiency during the RTW process is assessed after two years.

According to LE's, investigating and offering temporary or modified work is related to RTW-ES, but they state that non-temporary work is preferred over temporary work.

When considering RTW-related outcomes, both RTW and RTW-ES can be of interest to the RTW process [4,15], but the literature of RTW can not simply be transcribed to RTW-ES. For example, undertaking an effort (e.g. offering training or education) can be considered essential to RTW-ES because it influences factors relevant to RTW-ES (positive attitude of the employer, self-efficacy of the employee), regardless of whether the training has proven to be effective to RTW. In our previous research we have examined the strength and relevance of factors related to RTW-ES and RTW among employees applying for disability benefits after 2 years of sickness absence [4], and have investigated the comparability of the factors related to these two outcomes. We have concluded that different factors are relevant to RTW-ES and RTW, but the relationship between employer and employee is relevant to both. The lack of similarity between these outcomes can be explained by the relative independence of the outcomes. For example, RTW-ES can be sufficient or insufficient, regardless of RTW outcome. For example, when the RTW outcome is sufficient, the RTW efforts are assumed to be sufficient as well. However, RTW outcome can be sufficient despite lack of RTW-ES, and in cases where RTW efforts are sufficient the RTW outcome can be negative.

A strength of this study is that this is the first study that explores the implicit knowledge used by professionals to assess RTW-ES. Using a focus group method has proven to be an intensive but effective method to collect the implicit knowledge of LE's. In order to gather a wide range of arguments, grounds and factors, two focus groups have been assembled,

each using a different case. Moreover, to ensure the quality of the results, we have used a method to collect arguments which was as close as possible to being a natural situation while maintaining standardization. This way, the arguments collected by each LE could be used for group-wise discussion.

Another strength lies in the universal phrasing of the grounds mentioned by the LE's and the factors derived from these grounds. Discussions focused mostly on the applicability of the ground, i.e. if the ground could apply to all imaginable cases. For example, reorganization might not in all cases limit job availability for the sick-listed employee. Of course, some grounds (e.g. regarding the responsibilities of the employer) can be viewed in context: Dutch legislation requires the employer to undertake all efforts necessary to promote the RTW of the employee. However, these efforts are not specified, and mostly the procedural aspects and the relation between RTW efforts and RTW results are described in detail. Moreover, efforts to promote RTW are beneficial to RTW regardless of the legislative consequences (financial or otherwise). A good employer-employee relationship is beneficial to RTW [7] and is important to RTW-ES regardless of whether the employer will experience financial consequences.

Also of interest when considering efforts relevant to RTW-ES are the assessability (possibilities for discussion) and modifiability (possibilities of alteration) of factors. For example, no assessment is necessary for the factor age, which is also not modifiable. Self-efficacy, however, is a factor which is open to discussion and should be assessed by a professional, and is also modifiable.

A limitation might be that only two cases concerning CLBP were used. Using more cases or different cases might have yielded more factors. However, we feel that by selecting two cases which each concerned CLBP, but with different backgrounds and RTW processes, we have enhanced the opportunity to gather different arguments and discuss factors in an effective way. Furthermore, LE's from two Dutch SII's were included in the study. We do not know whether these LE's are representative of their occupational group. Future studies are necessary to reproduce and expand our findings. Another limitation related to the focus group method might be our use of actors for the roles of several stakeholders. However, our priority was to provide a standardized but realistic situation, which we feel we have achieved by training these actors to portray each stakeholder.

A further point of discussion might be that no factors related to 'disease', 'functions', and 'participation' were mentioned by the LE's. The lack of factors fitted within these categories can be attributed to the Dutch context, where disease and functions are investigated by the Social Insurance Physician (SIP) and other medical specialists. LE's mainly consider the participation as an outcome, and investigate aspects related to activities, taking personal and environmental factors into consideration when assessing RTW-ES. Also, some factors that are relevant to RTW have not been mentioned by LE's (e.g. gender, work requirements, family support), and have not been discussed.

Furthermore, by categorizing the factors derived from the focus group study in the ICF model an attempt was made to provide a clear overview and improve comparability. The categorization of the factors related to actions (e.g. measures, intervention or accommodation) was subject of debate. The ICF model is used to classify components of functioning and disability, while the actions are focused on changing one or more of these components. Moreover, using the ICF model for actions is a complicated process, and requires reduction of actions into a series of observations which could be categorized in the ICF model [14]. The availability of training would be a factor related to the environmental domain, but the offering of the training and the effect of the training has an effect on several components (e.g. educational level, competencies, attitude and job availability).

The relevance of this study lies in that it is one of the first studies to investigate factors relevant to RTW-ES [4]. The results found in this focus group study will provide an overview of factors relevant to the assessment of RTW-ES. The assessment of RTW-ES will remain a unique and multifactorial decision making process performed by a professional (i.e. the LE) based on the information which is available and the context it is placed in (e.g. legislation). However, providing factors relevant to the assessment of RTW-ES to the professionals who perform this assessment might make the assessment more evidence-based and could contribute to a more systematic approach of the assessment of RTW-ES.

Further research is required to investigate whether the results of this study can be replicated within a different context (e.g. another country, different focus group members), and whether they are relevant in cases where the patient has a disease other than CLBP (e.g. depression), or in cases where the patient has diagnosed comorbidity. In this study, the relevance of factors has been investigated, but no distinction has been made on the association itself, e.g. whether older or younger age is relevant to RTW-ES, and in what way. Further research could elaborate on the direction of the association. Also of interest to further research is whether the professionals all consider these factors during a similar assessment, and whether the interpretation (e.g. the importance of a factor in a specific case) is comparable. It should be investigated whether the introduction of the results found in this study (i.e. an evidence-based protocol) will contribute to a more systematic approach by the professionals assessing RTW-ES. Also, if professionals have access to similar information for the assessment of RTW-ES, this could benefit the reliability of the assessment and the argumentation used in the decision-making process.

Conclusions

In conclusion, this focus group study shows that 19 factors may be relevant to RTW-ES in sick-listed employees with CLBP. These factors fit into three domains of the ICF model (activities, personal and environmental), and also include actions which do not fit within the ICF model. Further research is necessary to replicate these findings in different contexts

(e.g. case, assessor, country). Providing the results of this focus group study to professionals assessing RTW-ES might contribute to a more reliable and systematic approach. Considering the importance of the quality of the RTW process, optimizing the assessment of RTW-ES is essential.

Competing interests

This study was funded by a SIG grant (Stichting Instituut Gak), the Netherlands. The authors declare no competing interests.

Authors' contributions

AM carried out the study and has drafted the manuscript. JHBG participated in the design of the study and helped to draft the manuscript. WELDB participated in the design of the study and helped to draft the manuscript. JWG participated in the design of the study and helped to draft the manuscript. SB helped carry out the study, participated in its design and coordination, and helped to draft the manuscript. All authors read and approved the final manuscript.

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5

Exploring factors relevant in the assessment of the return-to-work process of employees on long-term sickness absence due to a depressive disorder: a focus group study

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Abstract

Background: Efforts undertaken during the Return-to-Work (RTW) process need to be sufficient in order to optimize the quality of the RTW process. The purpose of this study was to explore factors relevant to Return-to-Work Effort Sufficiency (RTW-ES) in cases of sick-listed employees with a Depressive Disorder (DD).

Method: A case of a long-term sick-listed employee with a DD applying for disability benefits was used to gather arguments and grounds relevant to the assessment of RTW-ES. Two focus group meetings were held, consisting of Labor Experts working at the Dutch Social Insurance Institute. Factors were collected and categorized using the International Classification of Functioning, Disability and Health (ICF model).

Results: Sixteen factors relevant to RTW-ES assessment in a case of DD were found, categorized in the ICF-model under activities (e.g. functional capacity), personal (e.g. competencies, attitude) and environmental domain (e.g. employer-employee relationship), or categorized under interventions, job accommodations and measures.

Conclusions: This study shows that 16 factors are relevant in the assessment of RTW-ES in employees sick-listed due to DD. Further research is necessary to expand this knowledge to other health conditions, and to investigate the impact of these results on the quality of the RTW-ES assessment.

Background

The assessment of the efforts made in the return-to-work (RTW) process is an important issue when considering the quality of the RTW process [1]. RTW efforts made in the RTW process include all activities undertaken by employee, employer or health professionals involved, i.e. medical specialists, occupational physicians and therapists [2].

In several countries the assessment of Return-to-Work Effort Sufficiency (RTW-ES) is performed as part of the evaluation of the RTW process in relation to the application for disability benefits [1]. The perspective of this assessment is that if the RTW process is designed effectively and the RTW efforts are sufficient, the chances of RTW are optimal, and in accordance with health status and work ability of the sick-listed employee.

In the Netherlands, the assessment of RTW-ES takes place prior to the assessment of functional and earning capacity as part of the disability evaluation, after two years of sickness absence [3]. The RTW-ES assessment is performed only when the employee has not fully returned to work after two years of sickness absence, but does have remaining work ability and is applying for disability benefits. A reintegration report forms the basis for the assessment. This report is written by the employer and employee, and includes a problem analysis, i.e. a mandatory description of the (dis)abilities of the employee by a physician of the Occupational Health Service (OHS) hired by the employer, an action plan, i.e. the plan designed to achieve work resumption, and the employee's opinion regarding the RTW process. Both employer and employee provide information about their opinion about the RTW process. The employer drafts the report, and the employee adds a form about (non-) acceptance of RTW process, procedures and outcome. This information is added to the reintegration report, on which the RTW-ES assessment is based. Also in the reintegration report are records of all interaction (i.e. interventions, conversations and agreements) between the parties involved in the RTW process (e.g. employer, employee, physicians, specialists). An example of such an interaction is a request for professional advice in the case of suspected insufficiency of efforts during the RTW process. This request can be made by both the employer and employee.

This quality of the RTW process is assessed by Labor Experts (LE's) working at the Social Insurance Institute (SII, National Institute of benefit Schemes, Uitvoeringsinstituut Werknemersverzekeringen (in Dutch)). LE's are specialists in the field of vocational rehabilitation and after graduating, have followed a one to two year intensive postacademic in-company training. These LE's assess whether all opportunities for RTW have been investigated and seized (if applicable), and whether the conditions for RTW have been optimal. Moreover, the assessment focuses on which efforts can still be undertaken

to improve chances of RTW. The LE's have the opportunity to consult a Social Insurance Physician (SIP), and can invite the employer and employee to provide more information by phone, letter or face-to-face contact.

Assessing an outcome such as the efforts made in the RTW process is an elaborate and complicated decision-making process, in which relevant factors are regarded implicitly [1, 4]. In the Netherlands, a description about the assessment procedure of RTW efforts is available and described in a guideline for the LE's [3]. This guideline is an important instrument to ensure quality of the assessment and can be seen as a logical step in the process of professionalisation and quality assurance by LE's. However, this guideline consists mostly of information about the procedural aspects of the assessment, does not include an extensive list of factors which are relevant to the assessment, and is not based on scientific evidence. Up to date, studies on the sufficiency of RTW efforts are scarce [2], and little is known about the factors relevant to the assessment of RTW-ES.

A major cause of sickness absence and work disability is Depressive Disorder (DD) [5-7]. In the Netherlands, up to one-third of disability benefits in the Netherlands are awarded because of mental health conditions [8]. Of these mental health conditions, depressive disorder is the main cause of sickness absence (34%) [9], and has a more negative prognosis for RTW than other common mental health conditions [10].

To assess if the RTW process is designed effectively and the RTW efforts are sufficient in accordance with health status and work ability, it is of utmost importance to gather more explicit information about the factors relevant in the RTW-process of the sick-listed employee with depressive disorder applying for disability benefits. Factors were collected and categorized using the International Classification of Functioning, Disability and Health (ICF model). By analyzing our results within the ICF model we aim to use a comprehensive framework. Using this well-known categorization system also facilitates the connection to existing and future literature. This way, our approach could help to improve comparability.

Recently, we have investigated factors relevant to RTW-ES in a focus group study in workers sick-listed with Chronic Low Back Pain (CLBP)[4]. Now that we have investigated factors relevant to the assessment of RTW-ES in employees with CLBP, expanding this knowledge to include other health conditions is crucial. Knowing which factors are relevant in the assessment of RTW-ES by means of research and including this kind of information in the existing protocol will optimize not only the transparency and reliability but also the validity of the assessment. This optimized assessment should benefit the professionals assessing RTW-ES directly, and should benefit other stakeholders involved in the RTW process (e.g. employer, employee and health professionals) indirectly.

Therefore, the aim of this study is to explore factors relevant to RTW-ES in a case of a long-term sick-listed employee with Depressive Disorder applying for disability benefits, by means of focus group research.

Methods

The study was designed as a focus group study with two separate groups which had two meetings each, using the same case vignette.

Focus groups

The focus groups consisted of Labor Experts (LE's) working at the Social Insurance Institute (SII) in the Netherlands. We aimed at composing two focus groups of five to eight LE's. A minimum of five LE's in each group is necessary to ensure response diversity, and a maximum of eight LE's to facilitate discussion later in the focus group process. A total of 32 LE's were contacted by SII staff members, 16 from SII's in the northern region, 16 from SII's in the central region of the Netherlands. LE's were selected by the staff members for their expertise in the assessment of RTW-ES (one to six years experience), and to include members of all SII offices of the region. If the LE's agreed, the researcher (AM) contacted them and explained the study, and asked for their participation.

Each focus group had two meetings, where a case of RTW-ES was introduced. Both focus groups assessed the same case. The results from the second focus group were used to confirm and add to the findings of the first focus group. The procedure will be described in detail below (see also figure 1).

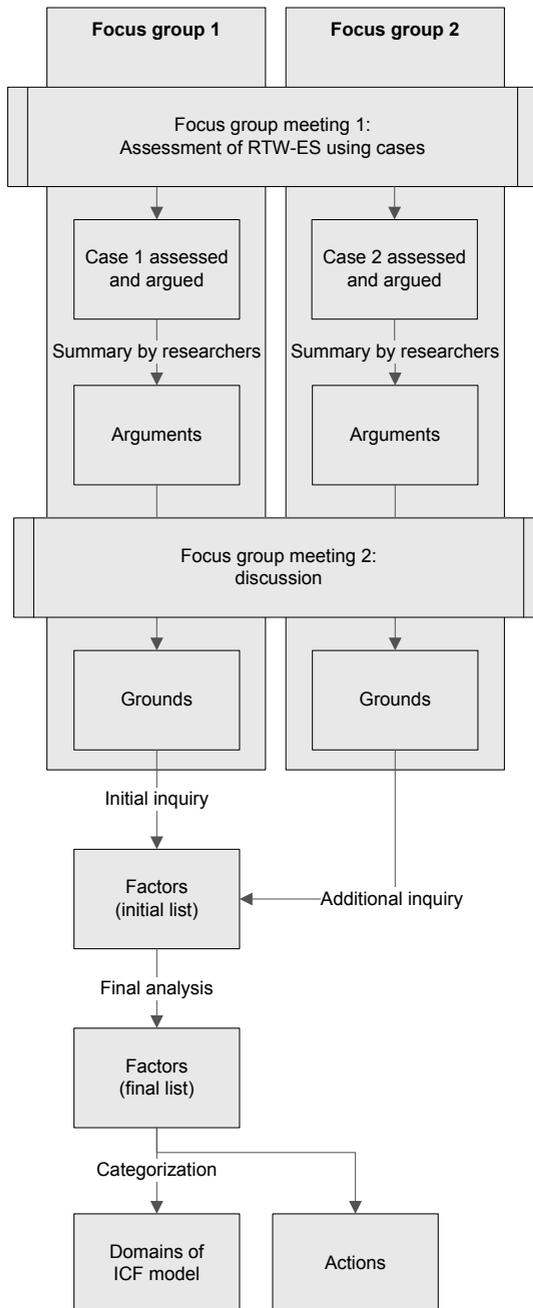


Figure 1. Overview of procedure to make factors relevant to Return-to-work Effort Sufficiency explicit by means of focus groups

Case

The case was selected by two of the authors (AM and SB), with the help of five LE's. These LE's acted as an expert group and did not participate in the focus groups. The case was selected to reflect a realistic situation on the basis of a well-defined RTW process and outcome, resemblance to daily practice for the assessors, and sufficiency of the information in the reintegration report. The case represented an employee on sickness absence for two years due to a DD (ICD-10 code F32), which was diagnosed by a physician. The employee had not returned to work fully, showed no comorbidity (e.g. other diseases causing or prolonging the sickness absence), and had been available for RTW interventions (e.g. had not been institutionalized for a prolonged period of time).

The case was about a 47 year old male with secondary vocational education, working in horticulture. The employee had been working in a small company as middle management for six years. The work ability assessment by the occupational physician revealed that the employee was still suitable for his original job, but that RTW should be gradual and supported. The company did offer this temporary, adjusted work, and facilitated coaching. After one year, the employer had consulted experts from the SII, which advised that the coaching trajectory had been sufficient so far. In the second year, the employee suffered from several relapses, and a conflict between employer and employee emerged.

Assessment

First focus group meeting – collecting the arguments

During the first meeting, a group of LE's was asked to assess individually the RTW efforts in the case presented. The procedure used matches the standard procedure at the Dutch SII, in which the LE receives the report made in the RTW process and the instruction to assess the RTW efforts. During the assessment, the LE's had access to their usual sources of information (e.g. legislation, guidelines, etc.). They were not allowed to consult each other or other LE colleagues. The LE's were given the opportunity to contact a fictitious employee, employer, physician of the OHS, and a physician of the SII. These roles were all performed by LE's, who had prepared their roles and had contacted physicians for advice and further information if they played the role of physician. The actors were provided with information which could be shared, and included a description of the behavior which was displayed. This standard procedure closely resembles the standard procedure used in the Dutch SII's when assessing RTW-ES.

In addition, the LE's received a clear instruction on the procedures of the day, and were asked to answer two questions. The questions were aimed at gathering information about 1) arguments used for deciding about the sufficiency of the RTW efforts, and 2) the decision outcome (sufficiency of RTW efforts). In order to analyze the data gathered per group, the authors (AM and SB) inventorized the arguments mentioned by the LE's, and also gathered

information about who mentioned each argument. In order to collect the underlying grounds behind the arguments, a second meeting with the LE's took place.

Second meeting – collecting the underlying grounds

During the second meeting, the LE's were invited to participate in a discussion session. This meeting took about 4 hours, and was chaired by a (senior) LE, with assistance of two of the authors (AM and SB). During the meeting, the participants were asked to explain why their arguments are relevant to the assessment of RTW efforts, thereby revealing the underlying ground of the argument. The ground is the underlying reason for mentioning the argument, and will make knowledge and experience more explicit [11]. The other participants were asked if they agreed with each ground provided, and were then asked to provide other grounds if available.

The researchers analyzed the grounds produced in the first focus group and collected factors from these grounds. All the words mentioned in the grounds have been considered, thereby collecting aspects relevant to the assessment of RTW-ES. Next, the grounds from the second focus group were analyzed to confirm factors found in the first focus group and identify additional factors. Finally, the authors (AM and SB) discussed all factors with each other in order to identify universal phrasing and correspondence between the factors. If AM and SB did not agree on the phrasing, other authors (JHBG and JWG) were consulted.

The factors were then categorized in accordance with the ICF model [12], into three domains: 1) activities, 2) personal, and 3) environmental.

Ethics and consent

According to the Dutch Medical Research Involving Human Subjects Act (WMO), approval is not necessary for this focus group study. The professionals' opinions were collected with their consent, without any requirement to follow altered rules of behavior. No real patients were involved in the study, and the anonymized, altered case used in this study was made available by the SII.

Results

The first focus group consisted of eight LE's, of which seven attended both meetings. The second focus group consisted of five LE's, of which all attended both meetings. One participant could not attend because of illness. Seven out of twelve LE's were male, and the LE's had between one-and-a-half and five years of experience in assessing RTW-ES.

Arguments and underlying grounds

During the first meeting, the members of the first focus groups each assessed the case assigned to their focus group. The authors (AM and SB) summarized 49 arguments. An example of such an argument is 'The communication was not optimal'. During the second meeting, the LE's were asked to elaborate on the reason for mentioning this argument; the underlying grounds. In this example, the ground was 'Communication quantity is not necessarily an indicator of communication quality'. By exploring the arguments mentioned in relation to the case 48 underlying grounds were collected. The members of the second focus group provided 19 arguments, from which 23 underlying grounds were collected.

In order to collect factors relevant to RTW-ES, the authors (AM and SB) analyzed the grounds collected in the first focus group, and determined 16 factors and 3 subfactors (see table 1). The second focus group did not yield any factors which were not mentioned by the first focus group. The resulting factors are described in relation to the ICF model in table 1, including examples of grounds mentioned in relation to these factors.

Table 1. Grounds and factors relevant to Return-to-work Effort Sufficiency in a depressive disorder according to focus groups, sorted using the International Classification of Functioning, Disability and Health (ICF) model

Factor	Ground example
Activities	
Functional capacity	"The type and severity of limitations are important to assess suitability for work"
<i>Job demands vs. functional capacity</i>	"The suitability of the employee's own work determines the RTW goal"
Personal	
Competencies	"The chances of RTW are higher in work which matches the competencies of the employee"
Attitude	"The attitude of the employee determines the progress of the RTW process"
Self-efficacy	"Fear of RTW can lead to inadequate RTW behaviour of the employee"
Illness perception	"A negative illness perception can delay the RTW process"
Environmental	
Work-relatedness of sickness absence	"The focus of the RTW process is determined by the work-relatedness of the absence"
Job availability	"The possibilities at the previous employer co-determine the chances of RTW"
<i>Employer size</i>	"Employer size indicates the possibilities for the employee to return to his/her original employer"
Employer attitude	"The employer has to support the employee in RTW at his/her company"
Relationship employer/employee	"The relationship between employer and employee can promote the RTW process"
<i>Communication quality and quantity</i>	"Communication quantity is not necessarily an indicator of communication quality"
Interventions	
Training/education	"Interventions such as job training can optimize RTW"
Job offerings	"An offered job with the prospect of returning to the original job increases the chance of acceptance by the employee"
Professional advice	"Professional advice can influence the RTW process"
Job accommodations	
Temporary/modified duty	"Offering temporary work can influence the chance of RTW, because the employee does not leave the work force"
Change of employer	"If RTW is prolonged and chances of RTW are reduced, return to a different employer should be investigated"
Measures	
Research/ assessment	"The employer has to investigate the possibilities at his/her company"
Monitoring	"The progress of the employee should be monitored by the employer"

Factors related to RTW-ES in depressive disorder

Factors related to RTW-ES in the activity domain of the ICF are the factor 'functional capacity', and its subfactor 'job demands vs. functional capacity'. Related to the personal domain are 'competencies', 'attitude', 'self-efficacy' and 'illness perception'.

Relevant environmental factors are 'work-relatedness of the sickness absence', 'job availability', with a subfactor 'employer size'. Other factors related to the environmental domain are 'employer attitude', 'relationship between employer and employee', and the subfactor 'communication quality and quantity'.

Seven factors describe actions rather than a situation, and could not be fitted within the ICF model. These factors are categorized under interventions, job accommodation and measures. Interventions are 'training/education', 'job offerings', and 'professional advice'. Job accommodations are 'temporary/modified duty', and 'change of employer'. Measures are 'research/assessment', and 'monitoring'.

Discussion

Sixteen factors and three subfactors related to RTW-ES were identified after analyzing arguments and grounds of LE's derived from a case with an employee sick-listed due to depressive disorder. Of these 16 factors, 9 were fitted within the domains of the ICF model: 'functional capacity' and 'job demands vs. functional capacity' (activity domain), 'competencies', 'attitude', 'illness perception', and 'self-efficacy' (personal factors); 'work-relatedness of sickness absence', 'job availability', 'employer size', 'employer attitude', 'relationship between the employer and employee', 'communication quality and quantity' (environmental factors). Seven factors did not fit within the ICF model because they describe actions undertaken during the RTW process. These factors are categorized as interventions ('training/education', 'job offerings', 'professional advice'), job accommodations ('temporary/modified duty', 'change of employer'), and measures ('research/assessment', 'monitoring').

A comparison of the factors relevant in the assessment of RTW-ES in employees sick-listed due to a DD and due to CLBP[4] show that 16 factors and 2 subfactors are relevant to both health conditions. The three factors which were only considered relevant in cases of CLBP are 'age', 'educational level' and 'tenure'. One subfactor, 'suitability of own work', was considered relevant in the cases of CLBP only, and another subfactor, 'reorganization', was considered to be relevant only in the case of DD.

When RTW processes in physical and mental health conditions are compared, initial RTW interventions mainly focus on reducing the symptoms of the health conditions [20]. In physical health conditions the focus is on reducing the symptoms in physical functioning, in mental health conditions the focus is on reduction of stress, coaching and supervisor

support [13,14]. However, in long-term sickness absence, RTW trajectories in both health conditions become more similar because psychosocial factors rather than symptoms influence the RTW process. When long-term conditions are considered, disease specificity is significantly reduced [15-17], which is consistent with our comparison of DD and CLBP. Our findings of similarity between the factors relevant to the assessment of RTW-ES seem to be in line with the literature on factors relevant in the RTW process of employees on long-term sickness absence. However, these differences between factors relevant in cases of DD and CLBP could be attributed to case differences. For example, the difference in relevance of the factor 'age' might be contributed to differences in the cases used. In the cases of CLBP, the employees in question were older than in the case regarding DD (50 and 57 vs. 47 years old). The chance of RTW decreases when employees are over 45 years of age [18]. The participating LE's in our study explained in the CLBP cases that they expect the employer to undertake more efforts when the age of the employee is increased [4]. In the case of DD it could be that LE's do not consider an age of 47 a relevant factor for RTW-ES. According to literature, age is important to RTW in both mental and physical health conditions [20]. However, the relation between age and time to RTW is less pronounced in mental health conditions. In a study of Koopmans et al. (2008) it was found that the factor 'age' is less relevant in mental health conditions, because time to RTW is already high in younger age groups [16]. However, some factors could be considered disease-specific. It could be that for example reorganization is only relevant in DD because reorganizations could cause a more stressful environment, thereby decreasing the chances of RTW in DD, but this might not have an added effect in CLBP. Future research is necessary to investigate the influence of case differences and disease specificity in the assessment of RTW-ES.

The relevance of this study lies in its unique topic of interest. The assessment of RTW-ES is an important part of the RTW process, but little information and no evidence-based guidelines are available. Investigating factors relevant in the assessment of RTW-ES is crucial for the optimization of the quality of the RTW process. Knowing which factors are relevant in the assessment of RTW-ES by means of research and including this kind of information in the existing protocol will optimize not only the transparency and reliability but also the validity of the assessment. Based on these results, a multifactorial approach to the assessment of RTW-ES is essential. A guideline focusing on all relevant factors could improve the quality of the assessment of RTW-ES and could support professionals involved in the RTW process in designing and monitoring the RTW process and the activities undertaken during this process. This optimized assessment should therefore not only benefit the LE's assessing RTW-ES, but also other stakeholders involved in the RTW process, e.g. employer, employee and health professionals. Considering the importance of the assessment of RTW-ES, this optimization is essential.

The main strength of this study lies in its investigation of this unknown territory by means of focus group research. Focus groups have proven to be an effective method to gather information about implicit knowledge of professionals [11, 19-21]. When literature is lacking, expert knowledge is considered an appropriate means of collecting evidence. Also, we have used two focus groups, to ensure a minimal amount and diversity of response. The two focus groups yielded a different number of arguments, however, both groups touched the same major issues when discussing the arguments and underlying grounds.

Moreover, during the assessments, additional information was presented by actors in order to reflect a more realistic situation. We agree that this method of presenting additional information could be a source of variation. However, we have chosen for this method because it reflects a more realistic situation, and we wanted the assessment to be as close to the actual situation as possible.

A possible limitation of this study is the use of only one case. Also, the case depicted a specific case of DD, while there are many appearances of DD. However, the effect of the use of this single case is unknown. While the use of more cases or different cases might have yielded different results, the majority of the results which have been found in relation to the cases about CLBP have been replicated in this study.

Future research should focus on the reproducibility of this study in a different context by investigating different cases, with different health conditions, DD appearances, or employee characteristics (e.g. gender). Using different focus groups and legislative context could improve the generalizability of the results and provide more insight into the assessment of RTW-ES. Also of interest for further research would be the effect of the use of the factors on the reliability of the assessment. Providing a list of the relevant factors could increase the homogeneity and thereby the quality of the assessment of RTW-ES.

Conclusions

In conclusion, this study shows that 16 factors are relevant in the assessment of RTW-ES in employees sick-listed due to a DD. This information is crucial considering the importance of the assessment of RTW-ES. Further research is required to explore factors relevant to RTW-ES in other health conditions, and to investigate the impact of these results on the quality of the assessment of RTW-ES.

Competing interests

This study was funded by a SIG grant (Stichting Instituut Gak), the Netherlands. The authors declare no competing interests.

Authors' contributions

AM carried out the study and has drafted the manuscript. SB helped carry out the study, participated in its design and coordination, and helped to draft the manuscript. JHBG participated in the design of the study and helped to draft the manuscript. JWG participated in the design of the study and helped to draft the manuscript. All authors read and approved the final manuscript.

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6

Effect of a protocol on labor expert agreement in the quality assessment of the return-to-work process

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Abstract

Introduction: In this study the effect of the introduction of a protocol for the assessment of the quality of the return-to-work (RTW) process has been examined. This assessment is performed by Labor Experts (LE's) and focuses on the Sufficiency of Efforts undertaken by the stakeholders during the RTW process (RTW-ES). The purpose of this study was: 1) to examine the effect of the introduction of this protocol on LE agreement in i) RTW-ES outcome, and ii) factor importance, and 2) to investigate the feasibility of the RTW-ES protocol.

Methods: In a repeated measurement design, 38 LE's of the Dutch Social Insurance Institute assessed a case of RTW-ES twice, using the RTW-ES protocol only during the second assessment. McNemar's test, paired t-tests and F-tests were used to examine the effect of the protocol on level of agreement and for correlated variance. Descriptive statistics were used to describe RTW-ES protocol feasibility.

Results: The LE agreement on RTW-ES changed from 65% (T1) to 76% (T2) ($p=0.125$). The overall mean importance of factors is 57.0 (T1), and 59.7 (T2), ($t\text{-value}=-1.73$, $p=0.092$). The overall standard deviation changed from 11.8 (T1) to 7.9 (T2), ($F\text{-value}(36)=0.45$, $p=0.991$). The feasibility of the RTW-ES protocol was good, LE's were positive towards the RTW-ES protocol (94%), and considered the protocol usable (81%).

Conclusions: This study shows that the introduction of an RTW-ES protocol improves the LE agreement in the RTW-ES assessment. The feasibility of the new protocol is good. However, the effect of the protocol was not significant and the study design has its limitations. Further research is required to validate the RTW-ES protocol, and to investigate the effect of the protocol, using other study characteristics.

Key words: return-to-work; vocational rehabilitation; process assessment; inter observer variability;

Background

Considering the quality of the return-to-work (RTW) process, the assessment of the efforts made during the RTW process is an important issue[1]. In several European countries, this assessment of the efforts made in the RTW process is part of the application for disability benefits[2]. It focuses on the activities undertaken by the stakeholders - employee, employer, health professionals-, for example, supervision, training, and assessment. The assessment of RTW Effort Sufficiency (RTW-ES) is designed to ensure that all efforts necessary for an optimal RTW have been undertaken, thereby preventing unnecessary claims for disability benefits due to chronic disability[1,3]. With the high number of disabled workers, the outcome and content of this RTW process are important issues. The perspective of this RTW-ES assessment is that if the RTW process is designed effectively and the RTW efforts are sufficient, the chances of RTW have been tested in an optimal way, and RTW should be achieved in accordance with health status and work ability of the sick-listed employee. The assessment of RTW-ES investigates the quality of the RTW process, the remaining functional possibilities of the employee and future RTW opportunities. Not adequately evaluating this is problematic because opportunities for RTW or improvement of chances of RTW could be missed, which could cause premature claims for disability benefits.

The RTW-ES assessment in the Netherlands takes place after two years of sickness absence, prior to the assessment of functional and earning capacity as part of the disability evaluation. In other European countries this assessment takes place between two weeks (Belgium) and no time limit (e.g. Slovenia)[2]. The Dutch RTW-ES assessment takes place only if the employee has remaining work ability, but has not returned to work fully after two years of sickness absence. The assessment is based on a reintegration report, which is written by both employer and employee. The reintegration report includes a problem analysis, i.e. a mandatory description of the (dis)abilities of the employee by an Occupational Physician (OP) of the Occupational Health Service (OHS) hired by the employer, an action plan, i.e. the plan designed to achieve work resumption, and the employee's opinion regarding the RTW process. Records of all interventions, intermittent RTW process advice by independent professionals, and agreements between employer and employee are also required in the reintegration report[4,5].

The assessment of RTW-ES in the Netherlands is performed by Labor Experts (LE's) of the Dutch Social Insurance Institute (SII). LE's are specialized in the field of vocational rehabilitation and after graduating, have followed a one to two year intensive postacademic in-company training. LE's assess whether all opportunities for RTW have been examined and undertaken by the employee or employer, if applicable. The LE's also focus on the context of the RTW process, i.e. factors which might influence the RTW process and its quality, like the relationship between employer and employee, and the employee's attitude.

The LE's consider only the non-medical aspects of the RTW process, but they can consult a Social Insurance Physician (SIP) about the medical aspects of the RTW process, e.g. medical interventions and medical prospects. If necessary, the LE's can consult the employee, employer or OP to gather or verify information.

If the efforts made during the RTW process are considered insufficient by the LE, the direct and indirect consequences can be severe[2]. A direct consequence of insufficient efforts is that the application for disability benefits is delayed until the employer and/or employee have undertaken the necessary actions. A more indirect consequence is that insufficient efforts are an indication that the time to RTW of the employee has been unnecessarily prolonged. In 2010, LE's of the Dutch SII's were responsible for over 27,000 RTW-ES assessments[6]. Their decision has a significant impact on the lives of the sick-listed employee and his/her employer. Accordingly, a high-quality assessment to prevent inequitable outcomes is essential.

Because the decision-making process of the assessment of RTW-ES is complex, and many factors can be relevant[1,7,8], ensuring the quality of the assessment poses a challenge. Agreement between assessors can be decreased because of differences in 1) information obtained for the assessment, 2) information processed by the assessor, and 3) interpretation of the importance of the information[9]. The use of a protocol could improve the agreement between assessors and improve the assessment quality by increasing the reproducibility and transparency of the RTW-ES assessment [10,11], by providing evidence about relevant factors and providing a framework for the decision-making process.

Up to date, no evidence-based protocols are available for the assessment of RTW-ES. Therefore, we have developed an RTW-ES protocol for professionals in the field of RTW and work (dis)ability. The RTW-ES protocol provides a framework which includes those factors which are relevant for the assessment of RTW-ES, based on results from a survey study[1] and two focus group studies[7,8].

The survey study investigated the strength and relevance of factors related to RTW-ES[1]. During 4 months, 415 assessments of RTW-ES were investigated using a questionnaire filled out by LE's. Factor relevance was investigated by means of multiple logistic regression analysis. This analysis included employee age, gender, educational level, reason of absence (mental or physical), tenure, work relatedness of the sickness absence and the relationship between employer and employee. Factors which were excluded from the multiple logistic regression analysis due to lack of significance were periods of complete disability, and periods of work resumption. Based on the results of the multiple logistic regression analysis, the survey study revealed that the only factor related to RTW-ES was a good employer-employee relationship. The two focus group studies were aimed at gathering arguments

and grounds relevant to the assessment of RTW-ES according to LE's[7,8]. Factors were collected and categorized to improve comparability, using the International Classification of Functioning, Disability and Health (ICF model). Cases related to Chronic Low Back Pain (CLBP) and a Depressive Disorder (DD) have been investigated because these are two major reasons for work disability. Using these cases, 23 factors (including subfactors) were found to be relevant to the assessment of RTW-ES. Personal factors were employee age, educational level, competencies, tenure, attitude, self-efficacy, and illness perception. Environmental factors included work-relatedness of the sickness absence, job availability, company size, reorganization, employer attitude, and the relationship between employer and employee. Seven factors describing actions undertaken during the RTW process were described as intervention, i.e. communication, training, and job offerings), job accommodation (i.e. professional advice, temporary/modified job, and change of employer) and measures (research/assessment, and guidance/monitoring).

Next, a concept RTW-ES protocol was developed including factors found in these studies and a description of the relationship between these factors and the RTW-ES outcome. Subsequently, this protocol concept was discussed with experts in the field of vocational rehabilitation and protocol development, who were asked to comment and provide further suggestions for improvement. Based on these results, we established a final RTW-ES protocol.

The next step in the development of the protocol is empirical testing[12,13]. It is hypothesized that LE's using the RTW-ES protocol will focus on the relevant factors when assessing the efforts made during the RTW process and are aware of the evidence. Knowing which factors are relevant in the assessment of RTW-ES by means of research and including this kind of information in the existing protocol will optimize not only the transparency and reliability but also the validity of the assessment. This optimization of the assessment may benefit the professionals assessing RTW-ES directly, and may benefit other stakeholders involved in the RTW process (e.g. employer, employee and health professionals) indirectly. Considering possible future implementation of the RTW-ES protocol, investigating the feasibility of a new protocol in terms of usability and satisfaction is also important.

The study obtained two objectives: 1) To examine the effect of the introduction of a protocol for the assessment of RTW-ES in terms of LE agreement on i) RTW-ES outcome, and ii) importance of factors, and 2) to investigate the feasibility of the protocol in terms of i) satisfaction, ii) suggestions for improvement, and iii) time investment.

Methods

RTW-ES protocol description

The RTW-ES protocol consists of three parts: 1) a checklist including a list of 23 factors including subfactors, 2) an appendix with a description of the evidence for each factor and 3) a VAS-scale to measure the importance of each factor in the process of LE decision making (see Appendix B for the RTW-ES protocol (in Dutch)).

The checklist contains a list of questions focusing on each factor. The aim of these questions is to ensure that the LE will collect information about this factor, and that he/she will pay attention to the factor when assessing RTW-ES in this case. An example of a checklist question is 'Is the age of the employee higher than 45 years? Yes/No'. Some factors are investigated by two separate questions, to facilitate the LE in answering a possibly ambiguous question. An example of this is 'professional advice', in which both the 'request' and the 'adherence to' are of interest.

A description of the evidence of each factor is given in an appendix of the protocol. This evidence is based on grounds and statements concerning each factor on which LE's reached consensus in previous research[7,8]. An example of a ground for the factor age is 'A higher age makes it more difficult to RTW, and therefore the employer should put in more effort to facilitate RTW for the employee'.

The scale is designed to help determine the importance of each factor in the process of LE decision making by means of a VAS-scale. This scale is a ten centimeter line, on which LE's can indicate the importance of the factor on any given point of the line. This method of measurement is an efficient method to investigate relative preferences[14]. The importance of each factor is determined because it could be that the employee age is higher than 45 years, but that age is considered irrelevant in this case.

Study design

This study was designed by means of a repeated measurement with an intervention in between. The intervention was the introduction of the newly-developed protocol for the assessment of RTW-ES.

A group of LE's from the Dutch SII assessed a case of RTW-ES twice: once without use of the RTW-ES protocol (baseline measurement, T1), once with use of the protocol (experimental measurement, T2). The time between the baseline and experimental measurements was two weeks, and each measurement was preceded by group meetings in which the LE's received procedure instructions.

Subjects

LE's from three departments of the SII in the Netherlands were asked to participate in the study. They had to 1) be trained to perform RTW-ES assessments, and 2) have experience with the assessment of RTW-ES.

The case

The case was about a 47-year-old male who had not returned to work fully after two years of sickness absence due to a mental health condition. This case was selected by an expert group of LE's, in cooperation with the researchers. The case reflected a realistic situation in which several factors could be considered relevant, and RTW-ES outcome was debatable. The case included the anonymized reintegration report. In contrast with a real situation, the LE's did not have the opportunity to contact any stakeholders in the standardized setting. Therefore, three expert LE's checked the case for any omissions, and added the necessary information to the case.

Measures

LE descriptives were collected at T1 and included information about age, gender, years of experience working as an LE and assessing RTW-ES, number of cases assessed monthly on average in the past year, and time to last training related to the RTW-ES assessment. Agreement on RTW-ES outcome was investigated by a dichotomous question with the outcome 'sufficient' and 'insufficient'. The importance of each factor in this case was investigated by means of the 10 centimeter VAS-scale, where 0 was not important, and 100 was very important.

The feasibility of the RTW-ES protocol was investigated as part of the second measurement, using an open-ended evaluation questionnaire. This questionnaire included questions about the LE's satisfaction with the protocol (attitude towards protocol, usability), suggestions for improvement (clarifications, additions), and time investment (checklist, appendix scientific evidence). Two questions were added to this questionnaire: 1) about the number of cases the LE's had assessed between the first and second measurement, and 2) about the level of realism and completeness of the case used in the study.

Procedure

During the first group meeting, the researcher (AM) presented the procedure of the study to the participating LE's for 30 minutes. During this meeting, the LE's were given information about the time investment and the relevance of the study, but did not receive information about the exact aim of the study. The LE supervisor made clear that participation would be facilitated by management. Furthermore, anonymity was guaranteed. After the meeting, those willing to participate were asked to 1) fill out the LE descriptives questionnaire, 2) assess the case of RTW-ES and report their RTW-ES outcome on a questionnaire, and 3) fill

out the VAS-scale after the RTW-ES assessment. The LE's were pressed not to discuss the study, case, or questionnaires with others.

During the second group meeting, the researcher (AM) presented the protocol for the assessment of RTW-ES. The aim of this meeting was to make sure that the LE's had read the RTW-ES protocol (checklist, scientific evidence), and that they understood how they should use the protocol. The meeting lasted an hour, in which the LE's received and read a copy of the protocol. The remaining time was used for questions and discussion. At the end of the meeting, the LE's received the instructions for the second measurement. They were asked to 1) assess RTW-ES in the same case again, 2) fill out the questionnaire parts of the protocol (checklist, VAS-scale), and 3) fill out the evaluation form.

Data-analysis

LE descriptives such as age, gender, and experience were analyzed using descriptive statistics. A McNemar's test ($p < 0.05$) and Kappa analysis were used to investigate whether the protocol had an effect on LE agreement in RTW-ES outcome. A Kappa value of more than 0.60 is considered an acceptable reliability[15].

A paired t-test ($p < 0.002$, with Bonferroni correction) was used to investigate the effect of the introduction of the RTW-ES protocol on the mean importance of factors. An F-test ($p < 0.002$) for correlated variances was used to investigate the difference in variance between the two measurements. The effect size for paired measurements was also investigated for the overall importance of factors and each separate factor. An effect size of 0.20 is small, 0.50 is medium and 0.80 is large[16]. Intra Class Correlation (ICC) analysis (two-way mixed random, absolute agreement, single measures) was used to determine the inter-observer variance in relation to the total variance, calculated from the variance components of analysis of variance (ANOVA). An ICC of over 0.80 can be considered high, moderate between 0.50 and 0.80, and low if below 0.50[17].

Descriptive statistics were used to describe the feasibility of the RTW-ES protocol (satisfaction, suggestions, time investment). Qualitative analysis was used to categorize the comments and suggestions.

The statistical analyses were performed using PASW statistical package SPSS 18.0.

Results

Study population

Thirty-eight LE's participated in both measurements, of which 37 completed the VAS-scale twice. Table 1 presents the descriptives of the LE's participating in the study. The average LE age is 51 years (SD 6.2), 70% is male, and they have an average experience as LE of 14.5 years (SD 6.3), and experience with RTW-ES assessment of 6 years (SD 2.8). The monthly RTW-ES

assessment average is 5.5 cases (SD 3.5), and the time to the last RTW-ES related training is 17 months (SD 14.0). On average LE's have performed 2.5 RTW-ES assessments between the two measurements. All participants consider the case to be realistic (100%), and a majority considers the case to be complete (83.3%). The incompleteness was explained as the inability to contact employer, employee, OP and SIP during the assessment.

Table 1. Labor Expert descriptives¹

Labor Expert age (M(SD)) (N=37)	51.2 (6.2)
Gender (Male (%)) (N=37)	26 (70.3)
Labor Expert experience (Years (SD)) (N=37)	14.5 (6.3)
RTW-ES assessment experience (Years (SD)) (N=37) *	6.2 (2.8)
Monthly average number of RTW-ES assessments (M (SD)) (N=34)	5.5 (3.5)
Time to last RTW-ES related training (Months (SD)) (N=33)	17.0 (14.0)
Number of RTW-ES assessments between M1 and M2 (M (SD)) (N=33)	2.5 (1.5)

¹ mean(M), standard deviation(SD), and percentage(%)

* RTW-ES = Return-to-Work Effort Sufficiency

Effect of intervention on RTW-ES outcome

At T1 65% of the LE's agree that the RTW-ES outcome of the case is 'sufficient'. After the introduction of the protocol (T2), 76% agrees on RTW effort sufficiency. The McNemar's test revealed a p-value of 0.125. The Kappa analysis showed a moderate level of agreement (0.572, $p < 0.001$) between both measurements. This indicates that there is no significant difference in level of agreement in RTW effort sufficiency according to LE's between T1 and T2.

Effect of intervention on importance of factors

The overall mean importance of factors is 57.0 for T1, and 59.7 for T2, which is not significantly different (t-value=-1.73, $p=0.092$) (See table 2). The overall standard deviation is 11.8 for T1 and 7.9 for T2, which is not significantly different (F-value(36)=0.45, $p=0.991$). Of the 23 factors, 'functional capacity' and 'job offerings' show a significant increase in mean importance (t-value=5.62, $p=0.023$ and t-value=16.66, $p < 0.001$, respectively). No significant changes were found in the variances of each factor. The overall effect size for paired measurements is 0.41 (small to medium). The effect size of each separate factor ranges from zero to one, where the factor 'job offerings' has a large effect size (0.99), the factor 'functional capacity' a medium to large effect (0.65), and nine factors a small to medium effect ('self-efficacy', 'employee age', 'absence work-related', 'guidance/monitoring', 'communication', 'reorganization', 'suitability for own work', 'employee attitude', 'employer attitude', 'research/assessment', 'change of employer', range 0.20-0.48). All other factors have an effect of below 0.20.

The overall ICC of the LE's for all factors was 0.294 in T1, and 0.310 in T2 (both low).

Table 2. Importance of factors for each time measurement, and comparison of means and variances, collected by using a VAS-scale (0=not important – 100=very important)¹

	T1				T2				Paired t-test		F-test for correlated variances			
	M	SD	MD	range	N	M	SD	MD	range	N	t-value	p	F-value	p
Functional capacity	68.2	22.0	77	17-97	37	76.7	12.0	78.0	30-97	36	5.62	0.023*	0.59	0.943
Suitability for own work	74.8	18.2	77	28-97	37	77.7	10.5	79.0	48-97	37	0.98	0.330	0.52	0.974
Employee age	27.4	21.9	18	4-80	37	34.5	19.0	28.0	3-75	37	3.61	0.065	0.16	1.000
Educational level	44.1	20.9	45	11-80	37	47.0	15.3	50.0	10-73	36	0.67	0.420	0.30	0.999
Competencies	49.4	19.0	47	13-79	37	52.2	15.0	53.0	18-79	37	0.54	0.467	0.23	0.999
Tenure	43.5	23.0	48	3-80	37	45.0	20.1	48.0	4-77	37	0.32	0.576	0.19	0.999
Employee attitude	58.9	22.2	65	13-92	37	62.4	16.3	66.0	28-95	37	0.88	0.355	0.31	0.999
Self-efficacy	49.8	22.6	49	13-90	36	57.4	19.1	55.0	24-93	37	3.34	0.076	0.18	1.000
Illness perception	55.1	22.2	55.5	13-91	36	56.6	19.3	57.0	18-92	37	0.20	0.661	0.14	0.999
Absence work related	55.8	23.6	64.0	14-91	37	49.3	21.9	56.5	4-83	36	2.83	0.101	0.08	1.000
Job availability	73.2	17.1	75.0	19-98	37	75.3	9.2	75.0	57-94	37	0.40	0.533	0.55	0.963
Company size	59.9	23.3	69.0	7-93	37	60.0	17.7	69.0	25-85	37	0.00	0.989	0.28	0.999
Reorganization	35.3	22.0	34.0	2-81	37	40.0	24.0	41.0	1-85	37	1.11	0.300	0.09	1.000
Employer attitude	62.7	22.6	68.0	9-99	37	66.7	15.0	70.0	29-93	37	0.90	0.349	0.39	0.997
Relationship employer employee	61.1	23.0	68.0	7-88	37	62.5	16.9	66.0	26-92	37	0.15	0.702	0.32	0.999
Communication	61.0	23.6	65.0	10-99	35	65.3	13.3	68.0	29-90	37	1.03	0.317	0.55	0.964
Training	60.7	20.7	67.0	16-98	37	60.2	14.7	61.0	17-85	37	0.02	0.896	0.33	0.999
Job offerings	42.9	20.9	47.0	10-96	33	60.5	18.4	65.0	10-91	37	16.66	<0.001**	0.13	0.999
Professional advice	64.8	17.5	70.5	16-98	36	66.3	13.9	67.5	38-90	36	0.30	0.591	0.24	0.999
Temporary/ modified job	69.2	15.9	71.0	10-97	37	68.1	16.6	71.0	6-92	37	0.09	0.767	0.05	1.000
Change of employer	39.7	26.1	42.0	3-90	37	44.1	26.1	46.5	1-87	36	0.95	0.338	0.00	1.000
Research/ assessment	61.9	22.2	69.5	9-96	36	65.0	12.1	66.0	38-84	37	0.66	0.424	0.55	0.963
Guidance/ monitoring	72.4	11.6	73.0	45-95	37	69.1	10.9	69.0	45-92	37	2.50	0.123	0.07	1.000
Sum score	57.0	11.8	58.0	32-82	37	59.7	7.9	58.7	45-78	37	-1.73	0.092	0.45	0.991

¹ mean(M), standard deviation(SD), median(MD), and percentage (%)

*p<0.05, **p<0.001

Sources of disagreement

To investigate a possible source of disagreement in the RTW-ES outcome and factor importance an additional comparison of the answers in the RTW-ES protocol checklist was performed. Investigation of the answers in the protocol checklist shows that the agreement was above 80% in 20 of 26 questions (See table 3). The agreement was below 80% in 6 questions, which were regarding: 'self-efficacy', 'illness perception', 'work-relatedness of the sickness absence', 'communication', 'professional advice' (adherence to), and 'guidance'. When comparing the LE's with different RTW-ES outcomes (sufficient vs. insufficient), there is a significant difference in 'work availability' and 'communication'. If the work is considered to be available ($\chi^2=7.41$, $p=0.006$), and the communication is considered to be adequate ($\chi^2=4.65$, $p=0.031$), the chance of a positive RTW-ES outcome (sufficient) is significantly higher.

Feasibility

Thirty-three LE's (94.3%) had a positive attitude towards the RTW-ES protocol (See table 4). The two reasons given were: 'adds structure' (25 LE's), and 'makes thoughts explicit' (5 LE's). Reasons for not having added value were 'present knowledge is sufficient' (1 LE), and 'time investment too high' (1 LE). The protocol was usable according to 30 LE's (81.1%). The protocol was considered not usable for some reasons (e.g. too much room for own interpretation (3 LE's), and factor sequence not logical (2 LE's)). Suggestions were given for clarifications and additions. Clarifications were suggested for definitions and cut off points (e.g. when is functional capacity limited, when is employee attitude good), specification (types of competencies, company size in terms of number of employees and number of functions available) and terminology (Dutch phrasing of the terms). Suggested additions were related to the medical information and interventions, and adherence to occupational guidelines.

The average time investment was 19 minutes (SD 15.9, range 5-60) for filling out the checklist, and 25 minutes (SD 11.7, range 10-60) for reading the scientific evidence.

Table 3. Checklist answers at the second measurement, comparison of two subgroups based on Return-to-Work Effort Sufficiency (sufficient/insufficient)

Checklist answer	Overall %	RTW-ES outcome		Pearson χ^2	p
		Sufficient % (N=28)	Insufficient % (N=8)		
Functional capacity limited (no)	86.1	85.7	87.5	0.02	0.898
Suitable for own work (no)	91.7	92.9	87.5	0.02	0.629
Employee age >45 (yes)	97.2	100	87.5	3.60	0.058
Education low (no)	81.6	85.7	87.5	0.02	0.898
Competencies limited (no)	85.7	88.9	75.0	0.97	0.324
Tenure < 1 year (no)	94.4	92.9	100	0.61	0.437
Employee attitude (positive)	100	100	100	-	-
Self-efficacy (sufficient)	70.6	76.9	50.0	2.14	0.144
Illness perception (adequate)	74.3	81.5	50.0	3.20	0.074
Work related (no)	50.0	53.6	37.5	0.64	0.423
Work available (yes)	94.4	100	75.0	7.41	0.006**
Company size (small)	86.1	85.7	87.5	0.02	0.898
Reorganization (no)	100	100	100	-	-
Employer attitude (positive)	91.4	92.6	87.5	0.20	0.651
Relationship poor (no)	97.1	96.3	100	0.31	0.581
Communication (adequate)	68.6	77.8	37.5	4.65	0.031*
Training offered (yes)	88.9	85.7	100	1.29	0.257
Job offered (yes)	94.4	96.4	87.5	0.95	0.331
Professional advice requested (yes)	100	100	100	-	-
Professional advice adhered to (yes)	64.7	70.4	42.9	1.84	0.175
Temporary job (yes)	97.2	96.4	100	0.29	0.588
Change of employer investigated (no)	97.2	100	87.5	3.60	0.058
Change of employer pursued (no)	97.1	100	87.5	3.47	0.062
Research/ assessment (yes)	83.3	89.3	62.5	3.21	0.073
Guidance sufficient (yes)	79.4	92.3	37.5	11.24	0.001**
Monitoring sufficient (yes)	80.0	96.3	25.0	19.61	<0.001***

*p<0.05, **p<0.01, ***p<0.001

Table 4. Feasibility of the Return-to-Work Effort Sufficiency (RTW-ES) protocol (satisfaction, suggestions, time investment) ¹

Satisfaction		
Attitude towards RTW-ES protocol (N (%)) (N=35)		
Positive		33 (94.3)
	Adds structure	25
	Makes thoughts explicit	5
Negative		2 (5.7)
	Present knowledge is sufficient	1
	Time investment too high	1
Usability of RTW-ES protocol (N (%)) (N=37)		
Yes		30 (81.1)
No		7 (18.9)
Explanation	Leaves too much room for own interpretation	3
	Information asked for in checklist not easily available	2
	Factor sequence not logical	2
	Too many factors	2
	Not enough factors	1
		24
Suggestions		
Clarification		
Definitions and cut off points	functional capacity, educational level, employee attitude, self-efficacy, work-relatedness, company size, employer attitude, communication, temporary work, research	19
Specification	competencies, company size, temporary/modified job, guidance/ monitoring	8
Terminology	(Dutch terminology)	6
Additions	Medical information and interventions	3
	Occupational guidelines	2
Time investment		
(Minutes (SD))	Reading appendix scientific evidence	25 (15.9)
	Filling out checklist	19 (11.7)

¹ mean(M), standard deviation(SD), median(MD), and percentage (%)

Discussion and conclusion

The results showed that the LE's agreement in percentages on the RTW-ES outcome improved after the introduction of the RTW-ES protocol. The overall average importance of factors increased slightly after the introduction of the RTW-ES protocol, and the overall variance in importance decreased slightly. However, these changes were not significant in the current sample. The introduction of the protocol did have an effect on the importance of the factors 'functional capacity', and 'job offerings'. However, when taking the Bonferroni effect into account, only the effect on the factor 'job offerings' remains significant. The overall effect size was small to medium, but the effect size of the factors 'job offerings' and 'functional capacity' was medium to large, and nine other factors had a small to medium effect size.

The satisfaction of the LE's with the RTW-ES protocol was high. According to LE's, the protocol adds structure and provides a framework for the decision-making process. Suggestions for improvement focus mainly on clarification of definitions and cut off points used in the appendix of the RTW-ES protocol. The time investment for the first-time use of the RTW-ES protocol checklist was 19 minutes on average.

The lack of a significant effect of the RTW-ES protocol could be explained by a difference in interpretation by the LE's of the available information, and a relation between this interpretation and RTW-ES outcome. Investigation of the answers in the protocol checklist showed that the agreement was high in 20 out of 26 checklist answers. The agreement in checklist answers was moderate in the remaining 6 questions. There was a significant difference between the opinions of LE's concerning 'guidance' and 'monitoring' when comparing the RTW-ES outcomes. LE's who consider the guidance to be sufficient, are more likely to have decided that the RTW efforts were sufficient. Another possible explanation of the lack of a significant effect could be the sample size of this study. Based on data of a previous study in which a similar case was used[7], a sample size calculation for the RTW-ES outcome was performed. This calculation revealed that a total of 38 LE's was necessary to achieve a power of 0.90 for a significant improvement in LE agreement in RTW-ES outcome (proportions: $T_1=0.5$, $T_2=0.8$, $\alpha<0.05$, $\beta=0.07$). Unfortunately, no power analysis could be performed for the importance of factors, because no information was available at that time.

The ICC of the importance of factors between LE's increased, but remained low. No other ICC related to the assessment of RTW-ES is known to us, and no comparison can be made.

A strength of this study is that it is the first study to investigate RTW-ES assessment of LE's in terms of agreement. Another strength is that this study focuses on the introduction of an RTW-ES protocol as well as its feasibility, which is an important step in the development of a protocol[12,13]. Furthermore, for this study, one case was specifically selected by expert LE's for its completeness but also its complexity in terms of number of relevant factors and uncertainty of RTW-ES outcome.

A limitation of this study is the lack of a control group. This study was the first opportunity to investigate the effect of the RTW-ES protocol on LE agreement, and it was performed using the limited number of available LE's. Also, using the same case for both measurements could be a confounding factor, because the assessors' prior knowledge of the case could impact the second assessment. This practice effect of LE's during the assessment of RTW-ES is unknown. However, on average, the assessors have assessed between two and three other cases during the two weeks between measurements, which could reduce any practice effect. Furthermore, using the same case twice enabled us to compare the differences in assigned importance of factors.

The relevance of this study lies primarily in the optimization of the quality of the RTW process and the RTW-ES assessment. The assessment of efforts made in the RTW process plays an important role in ensuring the quality of the RTW process. The RTW-ES assessment should be performed using the maximum level of evidence available, and using a framework such as the RTW-ES protocol to optimize its reproducibility and transparency.

In previous research, we have investigated the factors relevant for the assessment of RTW-ES[7,8]. By defining an RTW-ES protocol, we were able to introduce this information to the LE's performing the assessment in a study. This study was essential to investigate the effect and feasibility of the RTW-ES protocol, and to investigate possibilities for implementation.

Future research should focus on the adaptation of the RTW-ES protocol based on the findings of this study. After this adaptation, the effect of the protocol should be investigated using different study characteristics, e.g. a more elaborate design including a control group and using other cases, or in a different country.

Also, further research is needed to elaborate further on the factors included in the RTW-ES protocol. Specifically, the RTW-ES protocol could include definitions and cut-off points of which the LE's asked for more clarification. These definitions and cut-off points could be defined using literature or expert meetings to achieve consensus. Furthermore, the usability of the RTW-ES protocol could be discussed with LE's, to investigate whether improvements can be made.

In conclusion, this study shows that the introduction of an RTW-ES protocol improves LE agreement in the RTW-ES assessment. Furthermore, the LE's satisfaction with the RTW-ES protocol is high. However, the effect of the protocol was not significant and the study design has its limitations. Further research is required to investigate the effect of the RTW-ES protocol using different study characteristics and for the validation and adaptation of the RTW-ES protocol. Investigating the effect of the introduction of an RTW-ES protocol is crucial considering the importance of the assessment and the need to professionalize the assessment.

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7

General discussion

Main findings

The assessment of Return-to-Work Effort Sufficiency (RTW-ES) is essential for the quality control of the Return-to-Work (RTW) process[1]. Assessing the efforts made in the RTW process can help in reducing the inflow into disability benefit schemes, by ensuring that all efforts necessary for an optimal RTW have been undertaken. In this thesis, we have found that the assessment of RTW-ES takes place in several European countries, with various assessment characteristics, for example, the information used for the assessment (medical, non-medical), and the background of the assessor (physician, graduate in Social Sciences) [2].

If the necessary RTW efforts have not been undertaken, opportunities to reach an optimal RTW level can be missed, which could lead to premature applications for and unjustified granting of disability benefits[1,3]. In 2010, Labor Experts (LE's) of the Dutch Social Insurance Institute (SII, National Institute of benefit Schemes, Uitvoeringsinstituut Werknemersverzekeringen (in Dutch)) were responsible for over 27,000 RTW-ES assessments[4]. Their decision has a significant impact on the lives of the sick-listed employee and his/her employer. If the efforts are considered insufficient, the application for disability benefits could be delayed until the employer and/or employee have undertaken the necessary actions, at the employer's expense. Furthermore, insufficient efforts are an indication that the time to RTW of the employee has been unnecessarily prolonged.

Accordingly, a high-quality assessment to prevent inequitable outcomes is essential. At the start of our project, no evidence-based guideline was available for the RTW-ES assessment, and no scientific literature existed on the subject of RTW-ES. Therefore, we have developed and evaluated an RTW-ES protocol for LE's from the Dutch SII (see appendix B). The RTW-ES protocol provides a framework which includes those factors which are relevant in the assessment of RTW-ES. Providing these factors relevant to the assessment of RTW-ES to the assessors might help to make the assessment more evidence-based, and contribute to the quality of the assessment. It is hypothesized that LE's using the RTW-ES protocol are aware of the evidence and will focus on the relevant factors when assessing the efforts made during the RTW process. This could improve the agreement between assessors and improve the assessment quality by increasing the reproducibility and transparency of the RTW-ES assessment.

The RTW-ES protocol has been developed based on results from a survey study, and two focus group studies. The survey study revealed that a good employer-employee relationship is associated to RTW-ES outcome[1]. Using focus groups consisting of LE's, and cases related to Chronic Low Back Pain (CLBP) and Depressive Disorder (DD), 23 factors (including sub-factors) were found to be relevant to the assessment of RTW-ES[5,6]. Factors include

personal factors such as employee age and educational level, environmental factors such as company size, and the relationship between employer and employee. Factors also include actions undertaken during the RTW process. These were categorized as interventions (e.g. training), job accommodation (e.g. temporary/modified work), and measures (e.g. research/assessment).

The development of the RTW-ES protocol was performed with support from an expert group consisting of experts in several related fields. As an important final step of protocol development we have performed an evaluation study in which the effect of the introduction of the RTW-ES protocol was investigated[7]. This evaluation study shows that the introduction of an RTW-ES protocol improves the LE agreement in the RTW-ES assessment. Furthermore, it is found that the LE's satisfaction with the RTW-ES protocol is high, and by providing structure, the protocol enhances the transparency and reproducibility of the assessment. However, the effect of the protocol was not significant and the study design has its limitations. Further research is required to investigate the effect of the RTW-ES protocol using different study characteristics and for the adaptation of the RTW-ES protocol.

Issues considering the assessment of RTW-ES

In daily practice, the RTW-ES is assessed in all cases where the employee has work ability and has not fully returned to his/her previous work after two years[1,3]. Considering the importance of the RTW-ES assessment, the quality of the assessment is essential. However, there is also an understandable need for efficiency. Several issues can be identified which are relevant to the quality and efficiency of the assessment of RTW-ES: 1) time to assessment, 2) risk factors for RTW-ES and RTW, and 3) quality of the RTW-ES assessment and RTW process.

Time to assessment

The assessment of RTW-ES is an important tool to check the quality of the RTW process. In the Netherlands, this assessment currently takes place after two years of sickness absence, if the employee has remaining work ability but full RTW has not been achieved[8]. The duration of this period of sickness absence is relevant to the RTW process. Considering phase-specificity of sickness absence, psychosocial factors become more relevant to the RTW process as the duration of sickness absence is prolonged and health conditions reach a chronic phase of disability [9,10].

During the first four years of the Dutch Gatekeeper Act (2001-2004), the RTW-ES assessment took place after one year of sickness absence. This has been prolonged to two years, to give the employer and employee more time to undertake the necessary efforts and achieve RTW according to work ability[11]. Both employer and employee have the opportunity to ask for professional advice from the SII during the RTW process. While this is advised by

the SII, asking for feedback on the RTW process after one year is not obligatory. The RTW-ES assessment after two years of sickness absence could be the first moment at which the employer and employee are aware of the sufficiency of their efforts. Obligatory involvement of the LE in an earlier stage than at the moment of assessment could improve the quality of the RTW process and could serve as a 'wake-up call'. For example, after one year of sickness absence the sickness absence is reported to the SII. At this point, the SII (LE and SIP) could check the quality of the action plan formulated by employer, employee and OP and the overall progress of the RTW process. This earlier involvement would give the employer and employee the opportunity to improve their efforts, thereby possibly decreasing the time to RTW. Also, employees sick listed with the same employer could benefit from early feedback. This earlier contact between LE and employer/employee/OP could also be an opportunity to identify cases at risk for chronicity or prolonged sickness absence. The employer or OP could identify risk cases and convey this to the SII, and the employees in question could be granted more support by employer, OP, and SII, to increase the chance of RTW.

Risk factors for RTW-ES and RTW

The identification of risk factors for RTW-ES and RTW is related to the quality and efficiency of the RTW-ES assessment. The factors relevant to RTW-ES, as summarized in the RTW-ES protocol, could be used to identify possible risk cases for RTW-ES. For example, the relation between employer and employee is important to RTW-ES[1]. If the relationship between employer and employee is poor, one can assume that the efforts made in the RTW process are sub-optimal. At the moment of assessment, the LE could investigate whether the relationship was poor, and if so, examine if any interventions designed to improve the relationship have been undertaken (e.g. mediation). Moreover, the OP could signal a poor relationship in an earlier stage and initiate the appropriate actions. This could be to propose an intervention to employer/ employee. However, the OP could also contact the SII for further support, especially if the status of the relationship is very poor, interventions are unlikely to be effective, or if more RTW-ES factors are complicating the RTW process.

An issue of interest is the relation between risk factors related to RTW-ES and their relation to RTW. The aim of the assessment of RTW-ES is to optimize the RTW process and promote the chances of RTW of the sick-listed employee. When the chance of RTW is of interest, risk factors for non-RTW might also be relevant to consider either by the stakeholders during the RTW process, or by the LE during the RTW-ES assessment. Risk factors include both personal and environmental factors. Examples of personal risk factors for non-RTW are higher age, and lower educational level[12]. Examples of environmental risk factors for non-RTW are the relationship between employer and employee and company size[13]. Our focus group study has shown that age and educational level is considered to be relevant for the assessment of RTW-ES[6]. However, when these risk factors for RTW are taken into account,

ethical connotations can be made. Based on literature, the chances of RTW of a sick-listed older employee are lower[12]. This would indicate an increase in efforts to optimize RTW in accordance with work ability. However, the reason for these increased efforts raises some issues. Based on factors such as age, risk cases can be identified which could need increased efforts to achieve RTW. However, these efforts are the responsibility of the employer, and the investments related to this (financial, psychosocial) could cause concerns when hiring staff, and could for example deter the employer from hiring older staff, thereby decreasing the chances of RTW for older employees. Related to this issue are the possibilities for change or improvement, and the responsibilities for employer and employee. During the RTW process, an investment in educational level is possible, but this is not the case for gender and age. When company size is considered, the employer can not be expected to increase the company size just for increasing the chances of RTW of the employee. These connotations should be taken into account when discussing factors relevant for RTW-ES, and when adapting the RTW-ES protocol content.

Quality of the RTW-ES assessment and RTW process

The quality of the RTW-ES assessment could benefit from the use of the RTW-ES protocol. Using the RTW-ES protocol could provide a framework which might benefit the reproducibility and transparency of the RTW-ES assessment and the report made by the LE, and could facilitate the quality of the assessment. However, cooperation between all stakeholders is important to the quality of both RTW process and RTW-ES assessment[14].

Currently, the employer, employee and OP are cooperating during the RTW process. During the RTW-ES assessment, LE and SIP cooperate to make the decision, and can contact the employer, employee and OP. The employer and employee are responsible for RTW and RTW-ES, and LE and SIP are responsible for the assessment of RTW-ES in relation to the RTW outcome. However, it is debatable to have two groups of stakeholders in the same RTW process with a common goal, i.e. RTW or RTW-ES. The quality of the RTW process and the RTW-ES assessment could benefit from more and earlier communication between all stakeholders in several ways. During the RTW process, improved communication could lower the threshold for the employer, employee and OP to contact the LE and SIP from the SII. Also, the LE and SIP would have more opportunities to provide advice to employer, employee and OP. Cooperation between all stakeholders could increase the chance of identifying risk factors or a complex RTW process, e.g. a poor relationship between employer and employee, or a low educational level of the employee. In these cases, the SII could provide advice, or assistance in other forms. Early contact and feedback on actions undertaken during the RTW process could also benefit concurrent or future RTW processes with the same employer and/or OP.

During the RTW-ES assessment, cooperation could also increase the transparency of the RTW-ES assessment, and understanding and acceptance of the assessment outcome. With more communication between all parties, the clarity and transparency of the decision-making process of the LE could be improved. This would increase the understanding of employer and employee of the decision outcome and its consequences.

Of course, involving more stakeholders in one RTW process could also complicate the process management. Therefore, the RTW process would benefit from a central case manager overseeing the RTW process, the progress made, and identifying the need to involve other professionals[15]. The competencies and skills of the case manager should be certified, and the case manager should be in an objective position, especially in cases of a disagreement between employer and employee. Currently, the case-manager can be the employer, a professional of the OHS, or someone with the assignment to do case-management with the company of the employer. By selecting the LE as case-manager, the role of the case-manager is formalized, and the LE would be able to oversee the RTW process. This could also improve early detection of risk cases, and initiation of necessary actions as mentioned above. The main aim is to make sure that the assessment is fair and just, and making the LE would also benefit the process preceding the RTW-ES assessment. This is especially important in cases of employees at risk of long-term sickness absence, and at risk of non-RTW-ES.

Methodological issues

Investigating RTW process outcomes such as RTW-ES is important in improving RTW process quality as a way of reducing inflow into disability benefit schemes[16]. In this thesis five studies focusing on the subject of RTW-ES have been performed. Because no other studies about RTW-ES are available, some methodological issues should be taken into account.

The main issue is that no literature and no other scientific studies were available to compare our findings to. While research on RTW has been performed to an extensive degree, this outcome is not comparable to RTW-ES[1]. It could be that RTW is not achieved, while the efforts made during the RTW process are considered sufficient.

Another issue is that we have only had the opportunity to perform the survey study and focus group studies based on a small group of LE's in the Netherlands. We have found that the assessment of RTW-ES takes place in several countries, and our findings could be applicable to RTW assessments in other countries (A1). However, further research is necessary to investigate differences in related factors, and effects of the judicial and social context of those countries.

Moreover, we have focused our investigation of RTW-ES primarily on the LE's performing the assessment, and not on any other stakeholders. However, we have included an expert group of professionals from different fields in the development of the RTW-ES protocol.

Another important methodological issue of this thesis is the level of evidence obtained. A survey study and focus group studies have been performed to gather evidence about the assessment of RTW-ES. While we have only had the opportunity to use these study methods, methods obtaining a higher level of evidence are preferred, such as randomized controlled trials. However, besides our studies, no scientific studies are available which investigate the subject of RTW-ES, and we feel that by combining the survey study with more qualitative methods such as the focus group studies, we have obtained results which can be used as a starting point for further research on the subject of RTW-ES.

Outcome measures

An issue regarding the outcome measures of this thesis is the nature of the RTW-ES outcome. The RTW-ES assessment is a complex decision-making process[1,7]. Because each assessment is unique, the professional will have the opportunity to take several factors into account when making a decision. The aim of this thesis was to provide a framework which will assist the LE's in making the RTW-ES assessment more transparent and reproducible. However, like most professional assessments, the RTW-ES outcome will always have room to reflect the individual assessor's experience and professional opinion. Of course, this makes quality control of an RTW process outcome such as RTW-ES very important.

Another issue related to measurement outcomes in this thesis is RTW outcome. In this thesis, the employees investigated have maximally achieved partial RTW. This makes it difficult to compare RTW outcome to existing literature. However, this RTW outcome is inherent to the assessment of RTW-ES, as it is only relevant to assess efforts made in the RTW process when RTW has not been achieved fully.

Unfortunately, we could not compare the RTW-ES outcome to level of disability. The level of disability is assessed by the OP and SIP's, and is not available to the LE's. It would be interesting to compare the RTW-ES assessment outcome to level of disability. For example, it could be that the RTW efforts are considered sufficient despite non-RTW, but the claim assessor decides that the employee has enough work ability to achieve RTW. A discrepancy between these outcomes would indicate that further cooperation between LE and SIP is needed, and that the SIP would have to investigate level of disability during or before the RTW-ES assessment on a structural basis.

Practical implications

When the RTW-ES assessment is performed correctly, all efforts are undertaken to reach the optimal level of employee's work ability. Until now, the LE's have a guideline available which describes the assessment process and the reintegration report contents[8]. However, this guideline does not depend on evidence-based research. In the Netherlands,

professionalization of LE's and other RTW professionals is a key issue. Dutch LE's receive a formal education, and can take part in an LE Society (Nederlandse Vereniging van Arbeidsdeskundigen, NVvA). Recently, an LE Knowledge Center (Arbeidsdeskundig Kennis Centrum, AKC) has been set up, which has the aim to increase knowledge of LE's in relation to their field, and to share this knowledge. Providing LE's with research relevant to their field is essential for LE professionalization and education.

In relation to the aim of expansion of knowledge and expertise, the RTW-ES protocol can be used by LE's and other RTW professionals as a framework when investigating RTW-ES related issues. Because this RTW-ES protocol provides an overview of factors which are relevant for the assessment of RTW-ES, it could assist in identifying issues to be reviewed, and in structuring discussion and further research.

To the LE's, using a protocol such as the RTW-ES protocol is important for their professionalization. It could benefit the reproducibility and transparency of the RTW-ES assessment, thereby making the assessment process more clear. This would also benefit the SIP's and other professionals cooperating with the LE's.

During the RTW process, employers, employees and OP's could benefit from the protocol in that it provides a framework for the factors relevant to the assessment of RTW-ES. When the stakeholders know which factors are of interest when assessing RTW-ES, these factors could be taken into account during the RTW process. Using the RTW-ES protocol information could help in optimizing the efforts made in the RTW process, thereby reducing the time to RTW. Overall, the protocol provides information about the factors relevant for the assessment of RTW-ES, and provides a framework which could increase the quality of the assessment. Moreover, the RTW-ES protocol could provide a starting point for further professionalization.

Recommendations for further research

In this thesis, we have gathered information about factors relevant for the assessment of RTW-ES. Using this information, we have developed and evaluated a protocol for the assessment of RTW-ES. This is the first thesis focusing on the assessment of RTW-ES. Future research should focus on reproducing our findings regarding 1) factors related to the assessment of RTW-ES and 2) the effect of the introduction of the RTW-ES protocol. Our findings should also be compared to research on the assessment of RTW-ES with different study characteristics, e.g. a different country, using different cases or a more elaborate design.

Furthermore, future research on RTW-ES should focus on further exploration of the factors relevant for the assessment. The evidence about the factors can be described in more detail, by determining more precise definitions and, if applicable, cut-off points for specific factors. Moreover, it is of interest to know if the quality and efficiency of the assessment of RTW-ES could benefit from an earlier involvement of the LE of the SII.

Conclusion

The RTW-ES assessment is important for the quality of the RTW process. Using survey study, focus group studies and expert opinion, an RTW-ES protocol has been developed. This RTW-ES protocol provides a framework for the RTW-ES assessment, and increases LE agreement and satisfaction. However, the effect of the protocol was not significant and further research is required to investigate the effect of the RTW-ES protocol using different study characteristics. The time to assessment, risk factors for RTW-ES and RTW, and quality of the RTW-ES assessment and RTW process are relevant to the quality and efficiency of the assessment of RTW-ES. Using the results of this thesis might help increase the transparency and reproducibility of the RTW-ES assessment, and improve communication and sharing of knowledge between stakeholders in the field of RTW-ES. Further research is necessary to reproduce the findings which are described in this thesis, to investigate RTW-ES using different study characteristics, and to elaborate on the RTW-ES protocol content.

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Summary

In Chapter 1 the background and context of this thesis are introduced, and the objectives of this thesis are presented.

This thesis focuses on the assessment of efforts to return to work (RTW), made during the RTW process. The quality of the RTW process and the efforts made during the RTW process are important issues when applications for disability benefits are considered. In the Netherlands, the quality of the RTW process is assessed as part of a policy based on the Dutch Gatekeeper Act. This Gatekeeper Act is a law designed to reduce the inflow into disability benefit schemes. The RTW Effort Sufficiency (RTW-ES) assessment takes place after two years of sickness absence, and is performed by Labor Experts (LE's) of the Dutch Social Insurance Institute (SII, Uitvoeringsinstituut Werknemersverzekeringen (UWV) in Dutch), with the assistance of Social Insurance Physicians (SIP's). The LE's assess whether all opportunities for RTW or improvement of work ability have been examined and undertaken by employer and employee, if applicable. In 2010, LE's of the Dutch SII were responsible for over 27,000 RTW-ES assessments.

The assessment of RTW-ES is essential for the quality of the RTW process and its outcome. Insufficiency of the efforts made in the RTW process can prolong the time to RTW, and can cause premature claims for disability benefits.

Assessing an outcome such as the sufficiency of efforts made in the RTW process is an elaborate and complicated decision making process. The quality of an assessment can benefit from the development and introduction of an evidence-based protocol. However, until now, no evidence-based guideline for the assessment of RTW-ES is available.

Objectives of this thesis

The main research objective is to develop and evaluate a protocol for the assessment of RTW-ES. Based on the main research objective, other research objectives are to investigate:

- whether the assessment of RTW-ES is performed in other European countries, and if so, what its characteristics are (chapter 2);
- which factors are related to RTW-ES and RTW and their comparability (chapter 3);
- the factors relevant to the assessment of RTW-ES in cases of sick-listed employees with Chronic Low Back Pain (chapter 4), and
- the factors relevant to the assessment of RTW-ES in cases of a sick-listed employee with a Depressive Disorder (chapter 5);
- the effect of the introduction of a protocol for the assessment of RTW-ES in terms of LE agreement, and feasibility (chapter 6).

The second chapter focuses on whether the assessment of RTW-ES is performed in other European countries, and if so, what its characteristics are. RTW-ES is assessed as part of the application for disability benefits in 7 out of 13 investigated European countries. Countries

show similarities, but also differences, such as the background of the assessor (physician or social sciences graduate), and time until the assessment for disability benefits (two weeks to no time limit), and consequences of a negative outcome of the assessment of RTW-ES (no consequence to financial sanction to the employer). Only in the Netherlands was a guideline available, which was not evidence based. This research has shown that the investigation of the RTW-ES assessment is internationally relevant, especially considering the desired coherence in European social policies.

Chapter 3 focuses on which factors are related to RTW-ES and RTW and their comparability. During four months, all assessments of RTW-ES and RTW (no/ partial RTW) among employees applying for disability benefits after two years of sickness absence, performed by LE's at 3 Dutch SII locations, were investigated by means of a questionnaire. Questionnaires about 415 cases were available. Using multiple logistic regression analysis, the only factor related to RTW-ES is a good employer-employee relationship. Factors related to RTW (no/ partial RTW) were found to be high education, no previous periods of complete disability and a good employer-employee relationship. Different factors are relevant to RTW-ES and RTW, but the employer-employee relationship is relevant for both. This means that the comparability of RTW-ES and RTW outcomes is limited, which is especially relevant when the sickness absence is prolonged, and full RTW is not possible. In these cases, full RTW has not been achieved, but the quality of the RTW process can still be assessed.

Chapter 4 focuses on the factors relevant to the assessment of RTW-ES in cases of sick-listed employees with Chronic Low Back Pain (CLBP). Using focus groups consisting of LE's working at the Dutch SII, arguments and underlying grounds relevant to the assessment of RTW-ES were investigated. Factors were collected and categorized using the International Classification of Functioning, Disability and Health (ICF model). Two focus groups yielded 19 factors, of which 12 are categorized in the ICF model under activities (e.g. functional capacity) and in the personal (e.g. age, tenure) and environmental domain (e.g. employer-employee relationship). The remaining seven factors are categorized under intervention, job accommodation and measures. Further research is necessary to replicate these findings in different contexts (e.g. case, assessor, country).

In chapter 5, the factors relevant to the assessment of RTW-ES in Depressive Disorders (DD) are investigated. A case of a long-term sick-listed employee with a DD applying for disability benefits was used to gather arguments and grounds relevant to the assessment of RTW-ES. Two focus group meetings were held, consisting of LE's working at the Dutch SII. Sixteen factors relevant to RTW-ES assessment in a case of DD were found, categorized in the ICF model under activities (e.g. functional capacity), personal (e.g. competencies,

attitude) and environmental domain (e.g. employer-employee relationship), or categorized under interventions, job accommodations and measures. In conclusion, this study shows that 16 factors are relevant in the assessment of RTW-ES in employees sick-listed due to a DD. Further research is necessary to expand this knowledge to other health conditions, and to investigate the impact of these results on the quality of the RTW-ES assessment.

In chapter 6, the effect of the introduction of a protocol for the assessment of RTW-ES is investigated in terms of LE agreement, and feasibility. In a repeated measurement design, 38 LE's of the Dutch Social Insurance Institute assessed RTW-ES twice in a case of a long-term sick-listed employee with a DD, using the RTW-ES protocol only during the second assessment. McNemar's test, paired t-tests and F-tests were used to examine the effectiveness on level of agreement and for correlated variance. Descriptive statistics were used to describe RTW-ES protocol feasibility.

The LE agreement on RTW-ES changed not significantly from 65% (T1) to 76% (T2). The overall mean importance of factors is 57.0 (T1), and 59.7 (T2), on a scale of 0-100. The overall standard deviation changed not significantly from 11.8 (T1) to 7.9 (T2). The feasibility of the RTW-ES protocol was good, LE's were positive towards the RTW-ES protocol (94%), and considered the protocol usable (81%).

This study shows that the introduction of an RTW-ES protocol improves the LE agreement in the RTW-ES assessment. The feasibility of the new protocol is good. However, the effect of the protocol was not significant and the study design has its limitations. Further research is required to adapt the RTW-ES protocol and investigate its effect, using other study characteristics (e.g. other LE's, different case, control group) and a larger sample of LE's.

In chapter 7, the main results of this thesis are discussed. The RTW-ES protocol described in this thesis provides a framework for the RTW-ES assessment, and increases LE agreement and satisfaction. However, the effect of the protocol was not significant and further research is required to investigate the effect of the RTW-ES protocol using different study characteristics.

The time to assessment, risk factors for RTW-ES and RTW, and characteristics of the RTW-ES assessment and RTW process are relevant to the quality and efficiency of the assessment of RTW-ES. Using the results of this thesis might help increase the transparency and reproducibility of the RTW-ES assessment, and improve communication and sharing of knowledge between stakeholders in the field of RTW-ES. Further research is necessary to reproduce the findings which are described in this thesis, to investigate RTW-ES using different study characteristics, and to elaborate on the RTW-ES protocol content.



Samenvatting

In hoofdstuk 1 worden de achtergrond en context van dit proefschrift beschreven, en worden de onderzoeksvragen van dit proefschrift geïntroduceerd.

Dit proefschrift richt zich op de beoordeling van de inspanningen die tijdens het proces van terugkeer naar werk, het re-integratieproces, worden gemaakt. De kwaliteit van het re-integratieproces en de inspanningen van werkgever en werknemer tijdens het re-integratieproces zijn belangrijke onderwerpen in het kader van de arbeidsongeschiktheidsuitkering. In Nederland vormt de beoordeling van de kwaliteit van het re-integratieproces onderdeel van de Wet verbetering poortwachter (Wvp), met als doel het voorkomen van blijvende arbeidsongeschiktheid.

De beoordeling van deze re-integratie-inspanningen vindt plaats aan het einde van de ziekteperiode van twee jaar, en wordt uitgevoerd door arbeidsdeskundigen (AD'en) van het Uitvoeringsinstituut Werknemersverzekeringen (UWV), in samenwerking met verzekeringsartsen van het UWV. De AD'en beoordelen of alle mogelijkheden voor terugkeer naar werk of verbetering van arbeidsmogelijkheden zijn onderzocht en, indien van toepassing, gerealiseerd door werkgever en werknemer. De beoordeling van re-integratie-inspanningen vindt plaats aan de hand van het re-integratieverslag (RIV), dat door werkgever en werknemer wordt opgesteld tijdens het re-integratieproces. In 2010 zijn door AD'en van het UWV meer dan 27 000 RIV-toetsen uitgevoerd. In dit proefschrift wordt de arbeidsdeskundige beoordeling van re-integratie-inspanningen besproken.

De beoordeling van re-integratie-inspanningen is essentieel wanneer de kwaliteit van het re-integratieproces en de uitkomst hiervan worden beschouwd. Onvoldoende inspanningen tijdens het re-integratieproces kunnen de tijd tot terugkeer naar werk onnodig verlengen, en eventueel leiden tot vermijdbare aanvragen voor een arbeidsongeschiktheidsuitkering. Het beoordelen van een uitkomst zoals 'voldoende re-integratie-inspanningen' is een uitgebreid en complex proces. De kwaliteit van een beoordeling kan verbeterd worden door de ontwikkeling en introductie van een wetenschappelijk onderbouwde methodiek. Echter, tot op heden is er geen wetenschappelijk onderbouwde methodiek beschikbaar voor de RIV-toets.

Doelen van dit proefschrift:

Het voornaamste onderzoeksdoel van dit proefschrift is het ontwikkelen en evalueren van een arbeidsdeskundige methodiek voor de beoordeling van re-integratie-inspanningen.

Gerelateerd aan dit onderzoeksdoel zijn bijkomende onderzoeksdoelen:

- Onderzoeken of de beoordeling van re-integratie-inspanningen wordt uitgevoerd in andere Europese landen, en zo ja, wat de karakteristieken zijn van deze beoordeling (hoofdstuk 2);

- Welke factoren gerelateerd zijn aan ‘voldoende re-integratie-inspanningen’ en terugkeer naar werk, en hun onderlinge vergelijkbaarheid (hoofdstuk 3);
- Welke factoren relevant zijn voor de beoordeling van re-integratie-inspanningen in casussen van werknemers die ziek gemeld zijn wegens chronische lage rugklachten (hoofdstuk 4);
- Welke factoren relevant zijn voor de beoordeling van re-integratie-inspanningen in een casus van een werknemer ziek gemeld wegens een depressieve stoornis (hoofdstuk 5);
- Wat het effect is van de introductie van een arbeidsdeskundige methodiek voor de RIV-toets ten aanzien van overeenstemming tussen AD'en, en de bruikbaarheid van deze methodiek (hoofdstuk 6).

Het tweede hoofdstuk richt zich op de vraag of de beoordeling van re-integratie-inspanningen plaatsvindt in andere Europese landen, en zo ja, wat de eigenschappen van deze beoordeling zijn. De zeven onderzochte landen laten overeenkomsten zien in de beoordeling van re-integratie-inspanningen, maar ook verschillen. Voorbeelden hiervan zijn de achtergrond van de beoordelaar (arts of sociale wetenschapper), de tijd tot de beoordeling voor arbeidsongeschiktheidsuitkering (twee weken tot geen tijdslimiet), en de gevolgen van een negatieve beoordelingsuitkomst (geen gevolgen tot financiële sanctie voor de werkgever). Alleen in Nederland zijn richtlijnen voor de beoordeling van re-integratie-inspanningen beschikbaar. Deze zijn echter niet wetenschappelijk onderbouwd. Dit onderzoek laat zien dat onderzoek naar de beoordeling van re-integratie-inspanningen internationaal relevant is, vooral ook door de behoefte aan meer coherentie in Europees sociaal beleid.

Hoofdstuk 3 richt zich op de factoren die gerelateerd zijn aan ‘voldoende re-integratie-inspanningen’ en terugkeer naar werk, en op de vraag in hoeverre deze twee uitkomstmaten vergelijkbaar zijn. Gedurende vier maanden zijn alle RIV-toetsen bij drie UWV-kantoren onderzocht via een vragenlijstonderzoek bij arbeidsdeskundigen. Over 415 casussen zijn vragenlijsten ingevuld. Door middel van multiple regressie-analyse blijkt dat een goede relatie tussen werkgever en werknemer de enige factor is die gerelateerd is aan ‘voldoende re-integratie-inspanningen’. Factoren gerelateerd aan terugkeer naar werk (geen/gedeeltelijke terugkeer naar werk) zijn: een hoog opleidingsniveau, geen eerdere periode van volledige arbeidsongeschiktheid, en een goede relatie tussen werkgever en werknemer. Verschillende factoren zijn gerelateerd aan voldoende re-integratie-inspanningen en terugkeer naar werk, maar een goede relatie tussen werkgever en werknemer blijkt relevant voor beide uitkomstmaten. Hieruit kan geconcludeerd worden dat de vergelijkbaarheid van re-integratie-inspanningen en terugkeer naar werk beperkt is, met name als het verzuim langer duurt en volledige terugkeer naar werk niet mogelijk is. Vooral bij geen volledige terugkeer naar werk blijft de beoordeling van kwaliteit van het re-integratieproces van belang.

Hoofdstuk 4 richt zich op de factoren die relevant zijn voor de beoordeling van ‘voldoende re-integratie-inspanningen’ in casussen van werknemers die ziek zijn gemeld wegens chronische lage rugklachten. Met behulp van focusgroepen met AD'en van het UWV zijn relevante argumenten en achterliggende gronden voor de beoordeling van re-integratie-inspanningen verzameld. Op basis van deze gronden zijn relevante factoren geïnventariseerd. Categorisatie van relevante factoren vond plaats op basis van het ICF-model, de Internationale Classificatie van Functioneren.

Twee focusgroepen leverden 19 factoren op, waarvan 12 in het ICF-domein onder activiteiten (bijv. functionele capaciteit), persoonlijke factoren (bijv. leeftijd, aanstellingsduur), en omgevingsfactoren (bijv. relatie tussen werkgever en werknemer). De resterende zeven factoren zijn gecategoriseerd onder interventies, werkaanpassingen en onderzoek. Verder onderzoek is noodzakelijk om deze bevindingen te repliceren in een bredere context (bijv. andere casus, beoordelaars c.q. landen).

In hoofdstuk 5 worden de factoren relevant voor de beoordeling van re-integratie-inspanningen bij een depressieve stoornis onderzocht. Hiervoor is gebruik gemaakt van een casus van een werknemer met een depressieve stoornis die een aanvraag voor arbeidsongeschiktheidsuitkering heeft gedaan. Met behulp van focusgroepen met AD'en van het UWV zijn argumenten en achterliggende gronden verzameld en onderzocht die relevant zijn bij de beoordeling van re-integratie-inspanningen. In deze casus van depressieve stoornis werden 16 factoren geïdentificeerd die relevant zijn bij de RIV-toets volgens AD'en. Deze factoren zijn gecategoriseerd onder activiteiten (bijv. functionele capaciteit), persoonlijke factoren (bijv. vaardigheden, houding) en omgevingsfactoren (bijv. relatie tussen werkgever en werknemer), of onder ‘interventies’, ‘werkaanpassingen’, of ‘onderzoek’. Concluderend kan gesteld worden dat 16 factoren relevant zijn bij de RIV-toets bij een depressieve stoornis. Verder onderzoek is echter noodzakelijk om deze bevindingen te repliceren, ook bij andere aandoeningen, en om de invloed van deze onderzoeksresultaten op de kwaliteit van de beoordeling van re-integratie-inspanningen te analyseren.

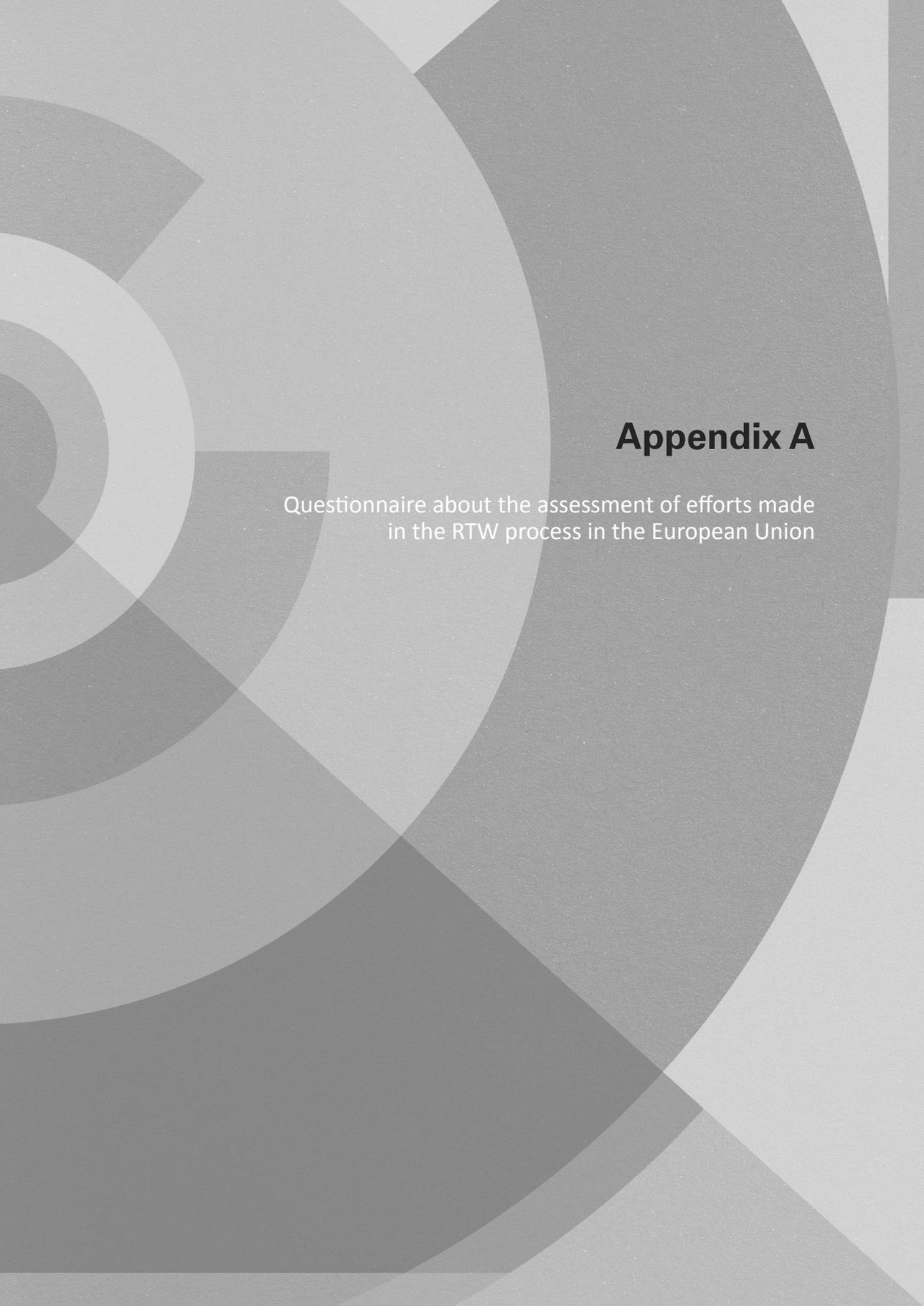
In hoofdstuk 6 wordt het onderzoek naar het effect van de introductie van een methodiek voor de beoordeling van re-integratie-inspanningen beschreven. Dit effect wordt onderzocht in termen van overeenstemming tussen AD'en en de bruikbaarheid van de methodiek. Door middel van een herhaalde meting hebben 38 AD'en van het UWV een RIV-toets beoordeeld bij een casus van een werknemer die zich ziek gemeld had in verband met een depressieve stoornis, waarbij de methodiek voor de beoordeling van re-integratie-inspanningen alleen werd gebruikt bij de tweede beoordeling. De effectiviteit van de methodiek is getoetst in termen van overeenstemming en gecorreleerde variantie. Beschrijvende statistieken werden gebruikt om de bruikbaarheid van de methodiek voor de beoordeling van re-

integratie-inspanningen te beschrijven. De mate van overeenstemming tussen AD'en is -niet significant- verbeterd van 65% (T1) naar 76% (T2). Het gemiddelde toegekende belang van factoren is min of meer constant met 57.0 (T1), en 59.7 (T2), op een schaal van 0-100, waarbij de gemiddelde standaarddeviatie -niet significant- verminderde van 11.8 (T1) naar 7.9 (T2). De bruikbaarheid van de methodiek voor de beoordeling van re-integratie-inspanningen is goed, AD'en zijn positief tegenover de methodiek (94%), en beschouwen de methodiek bruikbaar (81%).

Verder onderzoek is nodig om de methodiek voor de beoordeling van re-integratie-inspanningen uit te breiden op basis van (focusgroep)onderzoek en het effect hiervan te onderzoeken met behulp van andere onderzoekskarakteristieken (bijv. andere AD'en, andere casus, een controlegroep) en met meer AD'en.

In hoofdstuk 7 worden de belangrijkste bevindingen van dit proefschrift bediscussieerd. De methodiek voor de beoordeling van re-integratie-inspanningen maakt een beoordelingskader beschikbaar voor de AD'en, en bevordert de overeenstemming tussen AD'en en de tevredenheid van AD'en over de beoordeling. Het effect van de methodiek was echter niet significant, en verder onderzoek naar het effect van de methodiek is nodig.

De tijd tot de beoordeling, risicofactoren bij de RIV-toets en terugkeer naar werk, en de karakteristieken van de RIV-toets en het re-integratieproces zijn relevant voor de kwaliteit van de beoordeling van re-integratie-inspanningen. Gebruik van voornoemde resultaten zou de transparantie en reproduceerbaarheid van de beoordeling van re-integratie-inspanningen kunnen vergroten, en de communicatie en het uitwisselen van informatie tussen betrokken partijen bij het re-integratieproces kunnen bevorderen. Verder onderzoek is noodzakelijk om de bevindingen in dit proefschrift te reproduceren, om de beoordeling van re-integratie-inspanningen te onderzoeken met behulp van andere onderzoeksontwerpen en -karakteristieken, en om de inhoud van de arbeidsdeskundige methodiek voor de beoordeling van re-integratie-inspanningen verder uit te breiden.



Appendix A

Questionnaire about the assessment of efforts made
in the RTW process in the European Union

Questionnaire - the assessment of efforts made in the RTW process in <country>

According to the literature, in <country> the efforts to return to work (RTW) are assessed in relation to the application for disability benefits. We are interested in the assessment of the RTW process in several countries, and specifically in <country>.

Would you be so kind as to answer the following questions? Please provide us with an answer as complete and thorough as possible, to enable us to understand the situation in <country>. We have added a short explanation as to the situation in the Netherlands, to clarify the question and facilitate the comparison with the Dutch situation.

1. What is the definition of 'return to work' in your country?

In the Netherlands, return to work is defined as return to a work situation with a wage-value of at least 65% of the pay received before the sickness absence. This work should have a structural character, and the employer and employee must agree that the employer is not able to facilitate any better results.

2. What is the definition of 'efforts to return to work (RTW efforts)' in your country?

In the Netherlands, RTW efforts are all efforts, medical and vocational, undertaken by employer and employee to reach a satisfactory level of return to work. These activities should be reasonable in their context (possibilities of employment in company, educational level of employee, etc.).

3. When is the assessment in relation to the application for disability benefits performed?

In the Netherlands, the assessment of RTW efforts is performed after at least 1 year and 9 months of sickness absence. The assessment of RTW efforts takes place prior to the assessment for the application for Disability Benefits, which has to take place within two years of sickness absence.

4. Is the assessment of RTW efforts a separate process? (i.e. isolated from other assessments / assessment of other aspects)?

In the Netherlands, the assessment of RTW efforts is a separate step in the application for disability benefits. If the assessment of RTW efforts has a negative outcome, the application for disability benefits is delayed.

5. What is the input for the assessment of RTW efforts? Please specify the source(s) of this input.

In the Netherlands, the input for the assessment is primarily a report, based on the information by the employee (and the company's occupational physician) gathered by the employer and the company's occupational physician in the period of sickness absence.

The content of this RTW report is broadly defined by legislation. It should contain information as to the problem analysis, an action plan, (including any alterations and evaluations), medical information as to the functional capacities of the employee, information regarding the relationship between employer and employee, the actual activities undertaken in the RTW process, and the opinion of the employee regarding the RTW process.

For the assessment of RTW efforts, the assessor can contact the employee, employer and/or occupational physician for further explanation or clarification (by phone, face to face contact, or in written form).

6. Who assesses the RTW efforts?

In the Netherlands, a labour expert from a Social Security Institute assesses the RTW efforts. To assess specific medical information, or if the labour expert has doubts as to the plausibility of the functions of the employee, the labour expert can contact a Social Insurance Physician from the Social Insurance Institute.

7. What is the background of this assessor?

A certified Labour Expert has received a 4 year education focusing on the analytical or social sciences, with additional education to the bachelor's or a master's degree to receive the certificate for professional competence in the field of Labour Expertise. The Social Insurance Physician has received a 4 year education post graduate in Social Medicine.

8. What are the possible outcomes of the assessment of RTW efforts?

In the Netherlands, return to work is defined as return to a work situation with a wage-value of at least 65% of the pay received before the sickness absence. This work should have a structural character, and the employer and employee must agree that the employer is not able to facilitate any better results (see question 1). If RTW is not satisfactory, the actual RTW efforts are assessed. There are 4 possible outcomes of the assessment:

- A. RTW satisfactory
- B. RTW not satisfactory, but with solid explanation
- C. RTW not satisfactory, because of (complete) incapacity for work
- D. RTW not satisfactory, not enough RTW efforts

9. What are the consequences of this outcome/ these outcomes?

In the Netherlands, each outcome has its own consequence:

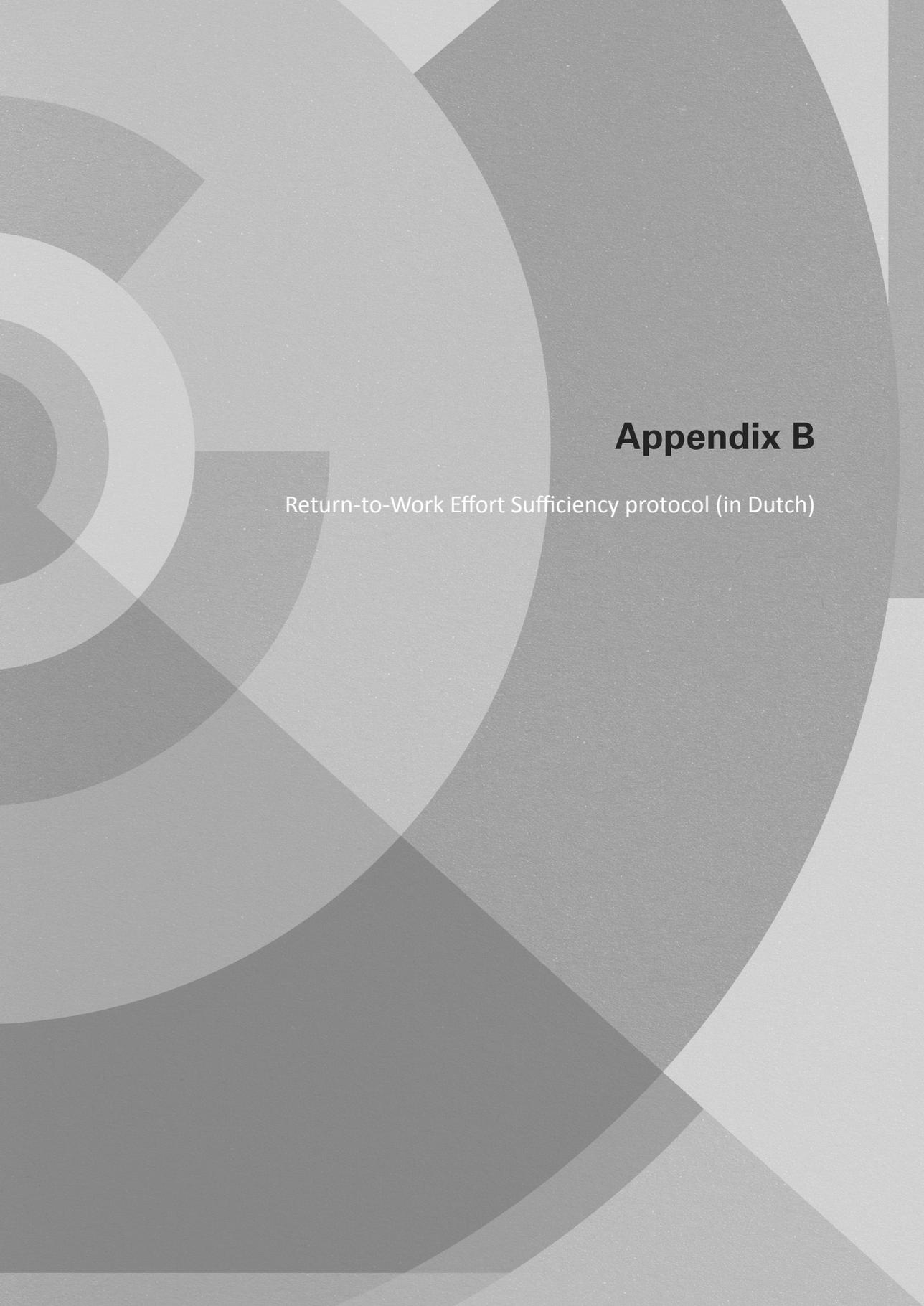
- A. application for disability benefits is processed
- B. the explanation is checked thoroughly (e.g. by judiciary advisors), application for disability benefits is processed
- C. the explanation is checked thoroughly by the Social Insurance Physician of the Social Security Institute, application for disability benefits is processed
- D. The application for disability benefits is delayed, and a financial sanction with a maximum of 52 weeks follows. Depending on who has omitted to perform the necessary RTW efforts, the employer has to continue payment, or the employee does not receive payment. The sanction is accompanied by conditions for repair. When the employer and/or employee comply, the sanction is lifted and the application for disability benefits is processed.

10. Who drafts the report?

In the Netherlands, the vocational expert (who also performs the assessment of RTW efforts) drafts the report.

11. Does the assessment in relation to the application for disability benefits relate to the ICF model?

In the Netherlands, there is no formal relationship to the ICF model. However, current research does focus on the ICF model as a suitable framework to describe the RTW process.



Appendix B

Return-to-Work Effort Sufficiency protocol (in Dutch)

Methodiek

‘Beoordeling re-integratie-inspanningen’

Deze methodiek kunt u gebruiken tijdens de beoordeling van de re-integratie-inspanningen. Deze methodiek bevat 1) een checklist, en 2) achtergrondinformatie (als bijlage).

In de checklist wordt een aantal vragen gesteld over factoren die van belang zijn bij de beoordeling van de re-integratie-inspanningen. De beantwoording van deze vragen kan eenvoudig door de desbetreffende antwoordcategorie aan te kruisen.

De checklist volgt vier stappen in het beoordelingsproces:

1. **het re-integratieresultaat**
2. **inventarisatie van relevante factoren**
3. **de weging van de factoren**
4. **uw eendoordeel**

Let op: Bij alle vragen dient een antwoordcategorie aangekruist te worden!
 Antwoorden in een dubbel kader verdienen bij de beoordeling *extra* aandacht gezien de relatie met terugkeer naar werken re-integratie-inspanningen (zie achtergrondinformatie). Indien sprake is van Geen (Duurzaam) Benutbare Mogelijkheden (G(D)BM) is deze methodiek niet van toepassing.

<i>Naam arbeidsdeskundige</i>
<i>Datum</i>

Re-integratieresultaat

Hieronder volgt een aantal vragen met betrekking tot het re-integratieresultaat ten tijde van het actueel oordeel:

N.v.t. **Ja** **Nee**

- Heeft de werknemer het werk hervat?
 Is het percentage loonwaarde meer dan 70%?
 Is de werkhervatting duurzaam en structureel?
 Is de belasting overeenkomstig de belastbaarheid?
 Is de werknemer akkoord met het re-integratietraject?

	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>
	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

Inventarisatie

De volgende factoren zijn van belang bij de beoordeling, en dienen geïnventariseerd te worden bij het beoordelen van de re-integratie-inspanningen (zie achtergrondinformatie voor toelichting per factor).

	Ja	Nee
Activiteiten/Participatie		
A1. Is de <i>functionele capaciteit</i> van de werknemer ernstig beperkt?	<input type="checkbox"/>	<input type="checkbox"/>
A2. Is de werknemer <i>geschikt voor eigen werk</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Persoonlijke factoren		
P1. Is de <i>leeftijd</i> van de werknemer 45 jaar of ouder?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P2. Heeft de werknemer een laag <i>opleidingsniveau</i> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P3. Heeft de werknemer beperkte <i>vaardigheden</i> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P4. Heeft de werknemer een <i>dienstverband</i> korter dan 1 jaar bij de huidige werkgever?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P5. Is de <i>houding</i> van de werknemer ten aanzien van het re-integratietraject positief?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P6. Heeft de werknemer voldoende <i>geloof in eigen kunnen</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
P7. Komen de <i>ervaren beperkingen overeen met de daadwerkelijke beperkingen</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Externe factoren		
E1. Is de ziekte <i>werkgerelateerd</i> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E2. Is er bij de huidige werkgever <i>gepaste arbeid beschikbaar</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
E3. Betreft het hier een <i>klein bedrijf</i> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

		Ja	Nee
E4. Is er sprake van een <i>reorganisatie</i> ?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
E5. Is de <i>houding</i> van de werkgever ten aanzien van het re-integratietraject positief?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
E6. Is de <i>relatie tussen werkgever en werknemer</i> slecht?		<input checked="" type="checkbox"/>	<input type="checkbox"/>
E7. Is de <i>communicatie</i> tussen werkgever en werknemer adequaat?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Inzet (Indien van toepassing)	N.v.t.		
I1. Heeft de werkgever <i>training</i> aangeboden?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
I2. Heeft de werkgever de werknemer <i>voorgedragen</i> voor passend werk	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
I3. Is er een deskundigenoordeel of ander <i>professioneel advies</i>			
a. aangevraagd?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. opgevolgd?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
I4. Is er <i>tijdelijk en/of aangepast werk</i> aangeboden?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
I5. Zijn mogelijkheden bij een <i>andere werkgever</i>			
a. onderzocht?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. benut?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
I6. Is er <i>onderzoek</i> gedaan naar de mogelijkheden van de werknemer om te hervatten?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
I7. Heeft de werkgever			
a. een goede <i>begeleiding</i> gegeven?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. het re-integratietraject voldoende <i>gemonitord</i> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

In hoeverre zijn de onderstaande factoren van belang voor uw eendoordeel over de re-integratie-inspanningen m.b.t. deze casus? Gelieve een kruisje te zetten op de lijn voor de mate waarin u de factor van belang acht.

<i>Voorbeeld:</i>	Absoluut niet van belang	<----->	Absoluut wel van belang
Factor	_____ X _____		
	Absoluut niet van belang	<----->	Absoluut wel van belang
A1. Functionele capaciteit	_____		
A2. Geschiktheid eigen werk	_____		
P1. Leeftijd	_____		
P2. Opleidingsniveau	_____		
P3. Vaardigheden	_____		
P4. Duur dienstverband	_____		
P5. Houding werknemer	_____		
P6. Geloof in eigen kunnen	_____		
P7. Ervaren vs. daadwerkelijke beperkingen	_____		
E1. Werkgerelateerdheid ziekte	_____		
E2. Beschikbaarheid gepaste arbeid	_____		
E3. Bedrijfs grootte	_____		
E4. Reorganisatie	_____		
E5. Houding werkgever	_____		
E6. Relatie werkgever en werknemer	_____		
E7. Communicatie	_____		
I1. Training	_____		
I2. Voordracht	_____		
I3. Professioneel advies	_____		
I4. Tijdelijk/aangepast werk	_____		
I5. Andere werkgever	_____		
I6. Onderzoek	_____		
I7. Begeleiding/monitoring	_____		

Wat is uw eendoordeel met betrekking tot de re-integratie-inspanningen bij deze casus (los van de mogelijkheid tot sanctioneren)?	<input type="checkbox"/>	Voldoende
	<input type="checkbox"/>	Onvoldoende

Achtergrondinformatie bij methodiek ‘Beoordeling re-integratie-inspanningen’

Toelichting

Hieronder worden de factoren in de checklist ‘Beoordeling re-integratie-inspanningen’ toegelicht. Centraal in de toelichting staan stellingen waarover consensus is bereikt met behulp van expert meetings met arbeidsdeskundigen. Deze factoren zijn ingedeeld volgens de Internationale Classificatie van Functioneren (ICF), in de categorieën ‘activiteiten/participatie’, ‘persoonlijke factoren’, ‘externe factoren’, en de categorie ‘inzet’.

Activiteiten/participatie

A1. Functionele capaciteit

Functionele capaciteit is van belang voor de beoordeling van re-integratie-inspanningen, omdat het type en de ernst van de beperkingen de geschiktheid voor eigen functie, kans op werkhervatting en andere arbeidsmogelijkheden bepalen. Dit geldt ook voor de mate van urenbeperking. De belastbaarheid en de prognose bepalen de mate van re-integratie-inspanningen van de werkgever en werknemer en het re-integratiedoel. Beperkingen kunnen leiden tot ongeschiktheid voor het eigen werk, maar dit is niet noodzakelijk. Ernstige beperkingen in de functionele capaciteit zijn van belang bij de beoordeling van re-integratie-inspanningen.

A2. Geschiktheid eigen werk

De aard en mate van beperkingen zijn van belang voor de arbeidsmogelijkheden, maar ook voor de geschiktheid van het eigen werk. De geschiktheid voor eigen werk (nu en in de toekomst) speelt een belangrijke rol bij het bepalen van het re-integratietraject. Geschiktheid voor het eigen werk bevordert de kans op terugkeer naar werk, aangezien deze functie beschikbaar is en past bij de krachten en bekwaamheden van de werknemer. Als het eigen werk geen haalbaar doel van de re-integratie is, zal de re-integratie hierop aangepast moeten worden. In elk geval is ongeschiktheid voor het eigen werk van belang bij de beoordeling van re-integratie-inspanningen.

Persoonlijke factoren

P1. Leeftijd

Naarmate de leeftijd van de werknemer vordert mag je meer verwachten van de inspanningen van de eigen werkgever, aangezien de kans op werk bij een andere werkgever afneemt. Literatuur op het gebied van terugkeer naar werk geeft aan dat de kans op terugkeer naar werk afneemt bij werknemers van 45 jaar en ouder. Een hogere leeftijd is dan ook relevant bij de beoordeling van re-integratie-inspanningen.

P2. Opleidingsniveau

Hoe hoger het opleidingsniveau, hoe meer mogelijkheden voor passend werk. Een laag opleidingsniveau verdient dan ook extra aandacht bij de beoordeling van re-integratie-inspanningen.

P3. Vaardigheden

Bekwaamheden bepalen de mogelijkheden voor ander passend werk bij de eigen werkgever. Hoe meer vaardigheden, hoe groter de kans op terugkeer naar werk. Als bepaalde noodzakelijke bekwaamheden niet aanwezig zijn kan de werkgever de werknemer ondersteunen bij het verkrijgen van deze bekwaamheden. Als de werknemer beperkte vaardigheden heeft is dit van belang bij de beoordeling van re-integratie-inspanningen.

P4. Duur dienstverband

Hoe langer het dienstverband, hoe meer er verwacht mag worden qua re-integratie-inspanningen van de eigen werkgever. Uit literatuur op het gebied van terugkeer naar werk blijkt dat de kans op terugkeer naar werk na arbeidsongeschiktheid groter is bij een dienstverband ten tijde van de ziekmelding van langer dan één jaar. Een dienstverband van minder dan één jaar ten tijde van de ziekmelding is dan ook een aandachtspunt bij de beoordeling van re-integratie-inspanningen.

P5. Houding werknemer

De kans op werkherhaling is groter bij een gemotiveerde werknemer. Goede arbeidsverhoudingen en het rekening houden met de affiniteit van de werknemer kunnen bijdragen aan een positieve houding van de werknemer ten opzichte van de re-integratie en daarmee een positieve invloed hebben op het re-integratieresultaat. In elk geval kan de mening van de werknemer over het re-integratietraject een indicatie zijn voor het leveren van voldoende inspanningen. Een inadequate reactie van een werknemer kan een indicatie zijn van een beperking. De werknemer heeft ook een eigen verantwoordelijkheid om alles er aan te doen om te re-integreren. Een negatieve houding van de werknemer ten aanzien van het re-integratietraject verdient extra aandacht bij de beoordeling van re-integratie-inspanningen.

P6. Geloof in eigen kunnen

Geloof in eigen kunnen is relevant voor de beoordeling van re-integratie-inspanningen en de kans op terugkeer naar werk. Als een werknemer benutbare mogelijkheden heeft maar niet werkt kan dit leiden tot verminderd zelfvertrouwen en geloof in eigen kunnen. Ook subassertiviteit kan de kans op verzuim vergroten. Verder vermindert angst voor werk bij een andere werkgever de kans op werkherhaling. Als de werknemer onvoldoende geloof in eigen kunnen heeft is dit van belang bij de beoordeling van re-integratie-inspanningen.

P7. Ervaren vs. daadwerkelijke beperkingen (ziekte-perceptie)

Een gebrek aan acceptatie van de beperkingen of ziekte-inzicht kan leiden tot inadequaaf en inconsistent gedrag van de werknemer. Het niet overeenkomen van de beperkingen en de uitvalsoorzaak kan een indicatie zijn van onderliggende problematiek (bijvoorbeeld een arbeidsconflict). Verder kan het niet overeenkomen van de daadwerkelijke belastbaarheid en de interpretatie van de belastbaarheid leiden tot minder re-integratie-inspanningen en daarmee een slechter re-integratieresultaat. Ook een verschil tussen ervaren klachten en daadwerkelijke mogelijkheden werkt belemmerend op re-integratie. Dit is relevant voor de beoordeling van re-integratie-inspanningen, omdat niet-werken bij benutbare mogelijkheden leidt tot een vergrote kans op (grotere) afstand tot arbeidsmarkt. Concluderend kan gesteld worden dat als de ervaren beperkingen niet overeen komen met de daadwerkelijke beperkingen, dit extra aandacht verdient bij de beoordeling van re-integratie-inspanningen.

Externe factoren

E1. Werkgerelateerdheid ziekte

De verplichtingen van de werkgever nemen toe als de werknemer is uitgevallen door een bedrijfsongeval, door een beroepsziekte, of door een beroepsgebonden aandoening. De uitvalsoorzaak is bepalend voor de focus bij de interventie. Indien er sprake is van een werkgerelateerde ziekte is dit van belang bij de beoordeling van re-integratie-inspanningen.

E2. Beschikbaarheid gepaste arbeid

De beschikbaarheid van gepaste arbeid vergroot de kans op werkherleving. De mogelijkheden binnen het eigen bedrijf geven een indicatie voor het doel van het re-integratietraject. Een werkgever dient bij het onderzoek naar herplaatsing in een zo hoog mogelijke verdien capaciteit alle passende functies (ook in andere bedrijfsonderdelen) mee te nemen. De aanwezigheid van een reëel arbeidsaanbod bepaalt de inzet van werkgever en werknemer. De perceptie van de werknemer over mogelijkheden binnen het eigen bedrijf is een belangrijk signaal voor re-integratiekansen. Indien er geen gepaste arbeid beschikbaar is bij de eigen werkgever is dit een aandachtspunt bij de beoordeling van re-integratie-inspanningen.

E3. Bedrijfs grootte

Hoe groter de organisatie, hoe meer re-integratiemogelijkheden bij de eigen werkgever aanwezig kunnen zijn en hoe meer er van de werkgever verlangd kan worden. Hierbij dienen de regelmogelijkheden bij de eigen werkgever en de diversiteit van functies en locaties mee te worden genomen. Indien sprake is van een klein bedrijf is dit van belang bij de beoordeling van re-integratie-inspanningen.

E4. Reorganisatie

Een reorganisatie gaat ten koste van arbeidsplaatsen, en kan de re-integratiemogelijkheden verminderen. Een reorganisatie bij de eigen werkgever is dan ook van belang bij de beoordeling van re-integratie-inspanningen.

E5. Houding werkgever

De werkgever dient zich in te spannen om alle mogelijkheden tot re-integratie te benutten. Een positieve houding van de werkgever ten aanzien van het re-integratietraject bevordert de kans op werkherhvatting. De houding van de werkgever kan overigens beïnvloed worden door financiële aspecten. Een negatieve houding van de werkgever ten aanzien van het re-integratietraject is een aandachtspunt bij de beoordeling van re-integratie-inspanningen.

E6. Relatie werkgever en werknemer

De relatie tussen werkgever en werknemer is van belang voor de werkherhvatting. De relatie bepaalt de bereidheid van de werkgever om naar oplossingen te zoeken, en van de werknemer om aan die oplossingen mee te werken. Bij ontbreken van resultaat bij een arbeidsconflict dient de Stecr-richtlijn arbeidsconflict gebruikt te worden.

Uit onderzoek naar de voorspellers van 'voldoende re-integratie-inspanningen' is gebleken dat een goede of neutrale relatie positief is gerelateerd aan het oordeel 'voldoende re-integratie-inspanningen'. Een slechte relatie tussen werkgever en werknemer verdient extra aandacht bij de beoordeling van re-integratie-inspanningen.

E7. Communicatie

Optimale communicatie tussen werkgever en werknemer bevordert de kans op eerdere terugkeer naar werk en verkleint de kans op het missen van re-integratiekansen en herstelmogelijkheden. De mate van communicatie is echter niet per definitie een indicatie van de kwaliteit van de communicatie.

De communicatie tussen werkgever en werknemer vormt een onderdeel van de arbeidsverhoudingen en is medebepalend voor de consensus tussen werkgever en werknemer. Het ontbreken van consensus over de geschiktheid voor eigen werk of andere re-integratiedoelen kan de re-integratie belemmeren. Een inadequate communicatie tussen werkgever en werknemer is van belang voor de beoordeling van re-integratie-inspanningen.

Inzet

I1. Training (opleiding)

Omscholing kan bijdragen aan werkherhvatting. Ook training gericht op het verbeteren van de belastbaarheid van de werknemer kan het re-integratieresultaat optimaliseren. Bij onvoldoende kwaliteiten van de werknemer dient de werkgever mee te denken over reële

omscholingsmogelijkheden en deze ook te faciliteren. Indien er bijvoorbeeld een functie aanwezig is bij de eigen werkgever die na een (korte) functiegerichte opleiding passend is voor de werknemer dient de werkgever deze opleiding aan te bieden. Indien de werkgever geen training of opleiding heeft aangeboden, terwijl dit wel van toepassing was verdient dit extra aandacht bij de beoordeling van re-integratie-inspanningen.

12. Voordracht

Het aantal beschikbaar gestelde functies door werkgever bevordert de kans op werkhervatting. Voordracht van werk hoort ook bij de zorgplicht van de werkgever. Het niet voordragen van de werknemer, terwijl er wel functies beschikbaar zijn, is van belang bij de beoordeling van re-integratie-inspanningen.

13. Professioneel advies

Een professionele aanbeveling dient door de werkgever onderzocht en overwogen te worden. Een deskundigenoordeel van het UWV kan bijvoorbeeld bijdragen aan een adequate uitvoering van het re-integratietraject en daarmee aan het re-integratieresultaat. Een deskundigenoordeel is een instrument om vastzittende re-integratie los te trekken, als instrument voor werkgever en werknemer om een oordeel te vragen over re-integratiemogelijkheden. Het opvolgen van een onjuist deskundigenoordeel (met daardoor een negatieve invloed op het re-integratieresultaat) kan de werkgever niet verweten worden. Een werkgever dient wel een deugdelijke grond te hebben om een professioneel advies te negeren. Het niet aanvragen en/of opvolgen van professioneel advies is een aandachtspunt bij de beoordeling van re-integratie-inspanningen.

14. Tijdelijk / aangepast werk

De werkgever is verplicht te onderzoeken of bundeling van geschikte taken tot een passende functie voor de werknemer mogelijk is als er geen andere passende functie voorhanden is. Ook bij uitblijven van herstel moet aangepast werk bij de eigen werkgever bespreekbaar en overwogen worden. De verschillen tussen belasting en belastbaarheid kan een indicatie geven van wat er aan de functie aangepast dient te worden. Goed functioneren in de aangepaste functie kan leiden tot terugkeer in eigen werk. Een degradatie qua functie kan echter wel de opstelling en motivatie van de werknemer negatief beïnvloeden. Een reële kans op terugkeer naar eigen werk bevordert de acceptatie door de werknemer. Terugkeer in (aangepast) eigen werk is ook de meest voor de hand liggende weg naar re-integratie, omdat dit aansluit bij de ervaring en vaardigheden van de werknemer en omdat de functie beschikbaar is.

Een andere mogelijkheid is om de werknemer tijdelijk werk uit laten voeren. Het aanbieden van een tijdelijke functie kan terugkeer naar werk bevorderen doordat de werknemer in het

arbeidsproces wordt gehouden, de belastbaarheid van de werknemer kan verbeteren en deze verbetering van de belastbaarheid getoetst kan worden. Duurzaam structureel werk heeft echter wel de voorkeur boven tijdelijk werk. Perspectief op duurzaam structureel werk bevordert bovendien het welbevinden van de werknemer, de motivatie en de energie om werk te hervatten. Het niet aanbieden van tijdelijk of aangepast werk, terwijl dit wel beschikbaar is, verdient extra aandacht bij de beoordeling van re-integratie-inspanningen.

15. Andere werkgever

Als er twijfel is over de haalbaarheid van terugkeer bij de eigen werkgever (spoor 1) dient een spoor 2-traject (terugkeer bij een andere werkgever) besproken en overwogen worden om het re-integratieresultaat te bevorderen. Een spoor 2-traject kan parallel aan spoor 1 lopen. Als er voldoende concrete mogelijkheden bij de eigen werkgever zijn kan dit een reden zijn om spoor 2 nog niet in te zetten.

Bij het overwegen van een spoor 2-traject dient te worden meegewogen dat een functie bij de eigen werkgever voor de werknemer gemakkelijker kan zijn om te accepteren dan een functie bij een andere werkgever. Bovendien kan angst van de werknemer om het werk te hervatten bij een andere werkgever de kans op werkherhvatting verminderen. Verder neemt de kans op terugkeer in spoor 2 af bij toename van de leeftijd. Indien de mogelijkheden in spoor 2 niet zijn onderzocht en/of benut terwijl dit wel van toepassing was, is dit van belang bij de beoordeling van re-integratie-inspanningen.

16. Onderzoek (assessment)

Onderzoek naar de kans op werkherhvatting voorkomt het missen van re-integratiekansen. De werkgever is verplicht te laten onderzoeken of de eigen functie geschikt is, en of er andere (geschikt te maken) functies binnen het eigen bedrijf zijn. Verder is het nodig om de medische situatie te onderzoeken. Als de medische situatie niet duidelijk is, kan het einddoel van de re-integratie minder adequaat bepaald worden. De medische situatie dient door werkgever en/of bedrijfsarts (pro-)actief in kaart gebracht te worden om de belastbaarheid duidelijk te krijgen en daarmee tijdig het juiste re-integratietraject in te zetten en daarmee de re-integratie te bevorderen. Indien het verrichten van onderzoek niet is uitgevoerd, terwijl dit wel van toepassing was, verdient dit extra aandacht bij de beoordeling van re-integratie-inspanningen.

17. Begeleiding / monitoring

Begeleiding van de werknemer en monitoring van de belastbaarheid dienen adequaat te zijn om tijdig het re-integratietraject bij te kunnen stellen als dit nodig is. Indicaties van voldoende kwaliteit en inhoud van de begeleiding van het re-integratietraject zijn het overeenkomen van belasting en belastbaarheid en bijstellingen van het re-integratietraject.

De werkgever dient een realistisch en haalbaar einddoel te stellen, en actief na te streven tijdens het re-integratietraject. Prikkelers zijn voor de werknemer een stimulans om mee te werken aan werkhervatting. De bedrijfsarts dient hierbij de werkgever te adviseren.

Een zo vroeg mogelijke start van het re-integratietraject en tijdige inzet van re-integratie-inspanningen zijn van belang. Verder dient pro-actief onderzoek verricht te worden om tijdig het juiste re-integratietraject in te zetten en daarmee de re-integratie te bevorderen. Als bijvoorbeeld te lang onterecht wordt vastgehouden aan terugkeer in het eigen werk worden re-integratiekansen gemist.

Het volgen van de protocollen geeft een indicatie van een adequaat uitgevoerd re-integratietraject. Het onderkennen van protocollen en/of het tijdig inzetten van adequate interventies kan het re-integratieresultaat positief beïnvloeden. Een adequate verklaring voor een late start van de re-integratie kan gelegen zijn in een intensieve medische behandeling en/of marginale belastbaarheid van de werknemer. Het ontbreken van goede begeleiding en monitoring door de werkgever is een aandachtspunt bij de beoordeling van re-integratie-inspanningen.



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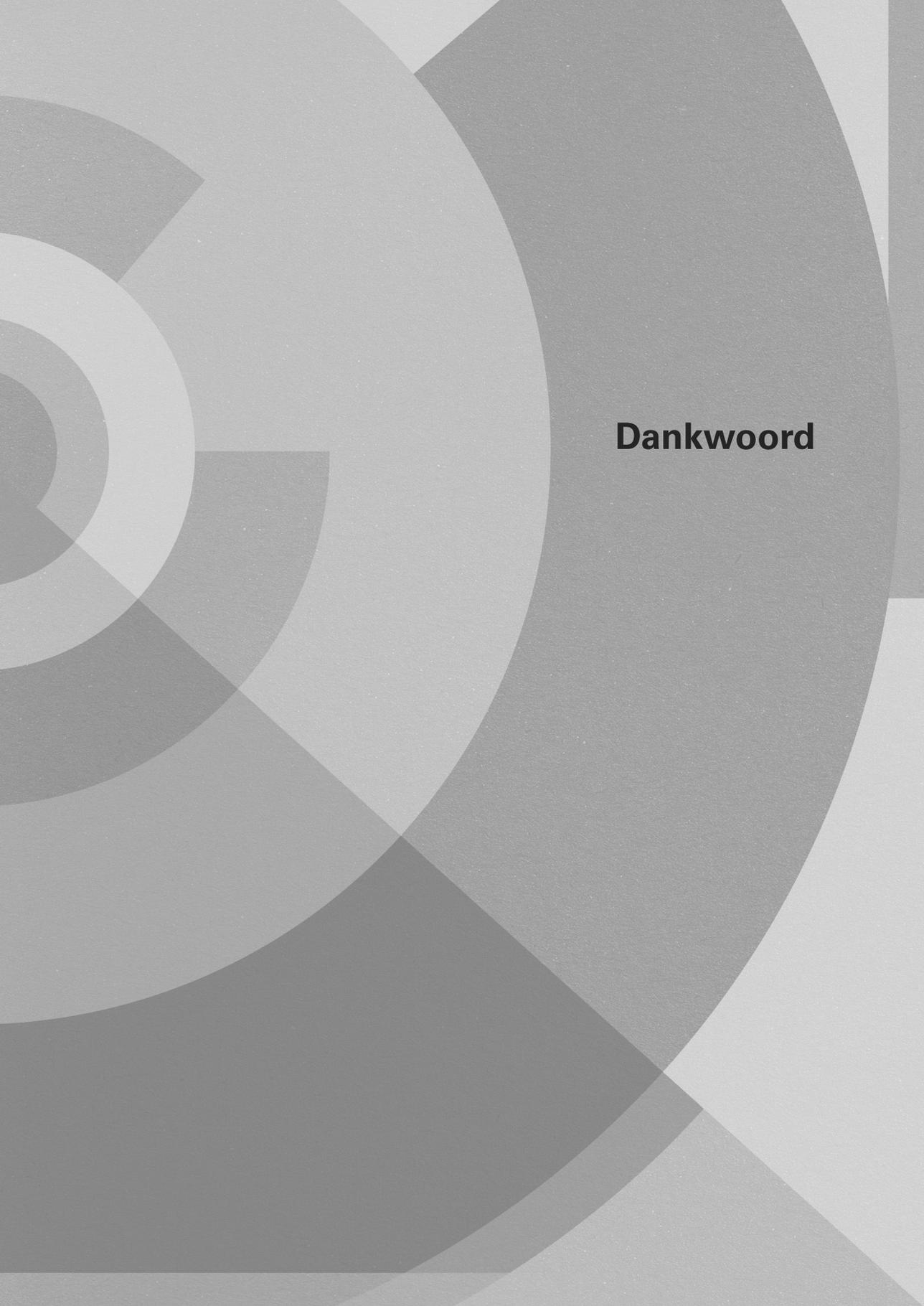
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!!!



Curriculum Vitae

Anna Muijzer werd op 6 augustus 1982 geboren te Leeuwarden. Na het Stedelijk Gymnasium in Leeuwarden ging zij Psychologie studeren bij de Rijksuniversiteit Groningen. Haar afstudeeronderzoek bij de Wetenschapswinkel Geneeskunde en Volksgezondheid van de Rijksuniversiteit Groningen was 'Aangezichtspijn de baas', een onderzoek naar de gezondheidsgerelateerde kwaliteit van leven van aangezichtspijnpatiënten. In 2006 studeerde zij af als sociaal psycholoog, met klinische psychologie als nevenrichting.

In 2007 startte haar promotie-onderzoek bij de afdeling Sociale Geneeskunde aan de Rijksuniversiteit Groningen, Universitair Medisch Centrum Groningen. Dit promotie-onderzoek had als doel om een arbeidsdeskundige methodiek te ontwikkelen voor de beoordeling van re-integratie-inspanningen. Voor dit onderzoek is een inventarisatie gemaakt van de beoordeling van re-integratie-inspanningen in andere Europese landen, zijn relevante factoren geïnventariseerd door middel van vragenlijstonderzoek en focusgroeponderzoek. Op basis hiervan is de arbeidsdeskundige methodiek voor de beoordeling van re-integratie-inspanningen ontwikkeld, en is het effect van de introductie van deze methodiek onderzocht. De ontwikkeling van deze methodiek draagt bij aan het bevorderen van de kwaliteit van de beoordeling van de re-integratie-inspanningen, en daarbij aan de professionalisering van het handelen van arbeidsdeskundige en verzekeringsarts.

Op dit moment is Anna op zoek naar een nieuwe uitdaging op het raakvlak van wetenschap en praktijk.

