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A scoping review of Scandinavian studies of sick-listed' and social insurance officers' experiences of their encounters

Short title: Encounters in sickness insurance

Abstract

Aim In the Scandinavian countries, social insurance officers (SIOs) hold key positions with regard to coordinating the return-to-work (RTW) process of workers on long-term sick-leave. This article aimed to systematically explore the experience of encounters between the sick-listed and SIOs and set out the current scientific knowledge base on factors related to the encounter that are perceived as having an impact on the sick-listed's RTW. *Method* A scoping review was conducted that included peer-reviewed articles published in the English language in the period January 2000 to February 2021. *Results* Of the 435 articles reviewed to determine eligibility, 38 were included. Most of the articles included were qualitative (68%) and focused on the sick-listed's experience of encounters with RTW professionals. The main finding of this review is that the majority of the sick-listed perceived the encounters with SIOs as positive. The perspective of SIOs was less subject to study, and the research focus was more often concerned with practical aspects of the encounter, such as stakeholder cooperation and the impact of policy on SIOs' working conditions. Furthermore, we found that SIOs experience challenges in stakeholder cooperation and in performing workability assessments, especially where objective medical information is scarce. *Conclusion* The findings of this review suggest that future studies should pay more attention to the SIO perspective in encounters between sick-listed and SIOs.

Keywords: return to work; RTW; sickness insurance; SIO; scoping review; sick-leave

Total word count: 8849

Background

Work is beneficial to workers' physical and mental health and well-being through its provision of opportunities for financial safety, personal development, and social interaction [1, 2]. Long-term sick-leave (LTSL) is therefore recognised as a significant public health problem that affects both the individual and society [2]. LTSL also greatly increases the risk for permanent work-life exclusion [3]. In addition to the individual costs of LTSL, health-related absence also implies significant costs for stakeholders such as the employer, the social security systems, and society in general [4]. Return to work (RTW), particularly for people on LTSL, can be a complex and multifaceted process [5] involving intrinsic interactions between the worker and the stakeholders [6].

RTW interventions aimed at identifying and reducing barriers to RTW are common in most industrialised countries for limiting LTSL and its associated consequences. Internationally, these interventions are often facilitated by designated RTW coordinators [7], who are responsible for initiating appropriate interventions to promote RTW and ensuring regular contact between the sick-listed, the employer, and relevant healthcare personnel [8]. In the Scandinavian countries of Norway, Sweden, and Denmark, government or municipal social insurance officers (SIOs) are typically responsible for coordinating the RTW process. The Scandinavian countries commonly have generous, rights-based compensation schemas where income support is often conditioned by active participation in skills-enhancing activities aimed at reintegrating the sick-listed into the labour market [9]. Also common to the three Scandinavian countries is that long spells of benefit reception, whether full-time or part-time, are possible for both employed and unemployed individuals. In the Norwegian case, for instance, sickness absence benefit and work assessment allowance can be received for up to four years before temporary health-related benefits are exhausted.

In addition to coordinating the RTW process, SIOs are often responsible for assessing the sick-listed's eligibility for benefits and considering disability criteria. As such, SIOs, in line with other street-level bureaucrats, have two roles as they perform both a care and a control function, which suggests that their duties are multifarious and potentially conflicting. Like other street-level bureaucrats, such as policemen and teachers, SIOs' judgments have a direct impact on the sick-listed's economic prospects. Therefore, the SIO's assessments are of great importance to most of the sick-listed, as they can significantly affect the lives and opportunities of the sick-listed through the assignment of benefits and sanctions [10].

The research literature addressing RTW coordinators' role and the impact that RTW coordinators have on the facilitation of RTW is evolving [6–8, 11]. However, the effect that the provision of RTW coordinators has on RTW is still subject to debate, and more research is needed to disentangle the reasons behind the success of RTW interventions [12]. Research on RTW suggests that the quality of the relationship between the sick-listed and stakeholders in the RTW-process can affect the sick-listed's recovery and RTW [13]. Investigating the perceptions of both the sick-listed and the SIO of the RTW coordination process can therefore provide valuable insight into what works well and where improvement is needed. In order to position the research on RTW coordination in the Scandinavian sickness insurance context to complement the emerging literature, it is necessary to get an overview of the current research focus, findings, and knowledge gaps. In this scoping review, the aim was to systematically explore the experience of encounters between the sick-listed and SIOs and set out the current scientific knowledge base on factors related to the encounter that are perceived as having an impact on the sick-listed's RTW.

Methods

The scoping review approach was chosen because it allows for consideration of the complexity of the RTW process, and it is not restricted to a particular focus or research method. This review is based on the approach of Arksey and O'Malley [14] in order to ensure comprehensive and transparent reporting of procedures and results.

Search

A systematic approach was taken to search, critically assess, and collate the findings. Relevant studies were identified by using combinations and variations of three different terms: "sick-leave", "social insurance officer", and "return to work" (see appendix 1 for a model search). The following databases were used in the literature search: Academic Search Premier, MEDLINE, Cinahl Full Text, Embase, and PsycINFO. An information scientist reviewed the search queries to ensure the quality of the search strategy. A manual search of the reference lists of the studies included, which were identified in the main search, was also carried out to identify additional literature. Articles published in the period January 2000 to February 2021 were included. The final search was conducted on February 2nd 2021.

Eligibility criteria

To be eligible for inclusion, the articles needed to satisfy the following criteria:

- empirical in nature and conducted within the Scandinavian sickness insurance context
- published in the English language in a peer-reviewed journal
- analytical focus on the encounter between the sick-listed and SIOs and factors perceived as having an impact on RTW from a sick-listed or SIO perspective
- having a quantitative, qualitative, mixed-method, review, or meta-analytic research design

Data selection

Once the articles were retrieved, data selection was organised using Rayyan software [15], where two independent researchers (TH and TT) separately screened the literature for relevant studies. The initial screening was made on the basis of title and abstract. In the case of doubt, the full-text paper was read to determine its eligibility. Following Arksey and O'Malley's [14] approach, the final inclusion criteria were created post hoc on the basis of increased familiarity with the literature. Following the initial screening of titles and abstracts, there were fewer articles that addressed the SIO perspective within the thematic area. As a result, articles that dealt with SIOs experience of factors perceived to facilitate or hinder the encounter at the margin of the articles' theme were included in the review. In the event of disagreement, the case for inclusion was discussed until consensus was reached. If consensus was not reached, a third reviewer (MK) was consulted.

Charting the data

A descriptive-analytical approach was taken to obtain key study information. The following information was extracted: first author, year of publication, study location, study population (including the study group), length of sick-leave and employment status, study participants' age range, study design, study purpose, type of data used, analytical methods, results regarding the experience of encounters, and other important results, which included cooperation with relevant stakeholders such as the Employment Service and physicians. Two authors (TH and TT) compared the articles retained to map the aims and relevant findings of the studied included.

Collating, summarising, and reporting the results

The included articles were exported to NVivo 12 [16], where one author (TH) coded and organised the results of the studies. A thematic analysis informed by Braun and Clarke was then performed [17]. The collation and summary of the results involved thematically organising the factors perceived to have an impact on RTW according to whether a factor could be associated with an encounter's interpersonal qualities or practical aspects. These categories were further organised into subcategories according to content similarity. Factors not

related to the encounter between the SIO and the sick-listed were not included in the analysis, nor were perspectives related to the workplace or employer cooperation. In some of the included articles the authors occasionally make references to professionals referring to professionals in health care, the employment service and in social insurance setting [18–20]. Findings and statements were commonly specified to the particular professional groups, however in cases where results were generalized to concern “professionals”, they were generally included in this study, ie. as in this quote from Mussener et al [18] “The interviewees reported feelings of being encouraged when the professionals they met made well balanced demands, requiring neither too much nor too little of them”. Insert Figure. 1 about here

Results

After merging the results from the databases and removing duplicates, 435 articles remained (Figure 1). Of these, 35 articles were identified through a manual search. A full-text evaluation was conducted for 61 articles, of which 38 articles relating to 31 studies satisfied inclusion criteria. The studies included originated mainly from Sweden (84%) and only six of the studies originated from Norway (8%) and Denmark (8%); most of the studies used qualitative analytical methods (68%) and in most of the studies the data was collected by individual interviews (50%) and group interviews (26%). Details of the search results are summarised in Table 1 and Table 2. The sample size of the studies included ranged from 5 to 5,802 participants. The sample types comprised individuals currently on or with previous experience of sick-leave, employees of the Social Insurance Agency or Employment Service, and managers, or a combination of these. The majority of studies addressed the sick-listed’s perspective (71%) and a broad objective that predominated among the aims of the included studies was the exploration of sick-listed’s experience of being on sick-leave and their encounters with RTW professionals such as SIOs and healthcare personnel. As regards the identified factors, many of these were emphasised as both facilitating and hindering, depending on whether they were perceived as being present.

Insert Table 1 about here, see end of document

The perspective of the sick-listed

Twenty-eight of the included studies addressed the sick-listed’s perspective (see table 1). We found that the practical and interpersonal aspects of the sick-listed’s experience of encounters with SIOs are important. Four factors can be outlined in respect of the structural aspects of the encounter that are perceived as affecting the sick-listed: SIO contact, measures taken, professional flexibility, and coordination. *SIO contact* and the

accessibility of the professionals were emphasised in several of the studies as critical factors. The presence of professionals who were accessible and who returned the sick-listed's calls was found to be positive [21–24]. SIOs who provided the sick-listed with pertinent information about their rights and obligations [25, 26] and other practical support, such as assisting the sick-listed in the completion of forms and answering their questions [23, 26–29], were recognised as supportive. Furthermore, professional guidance and feedback on RTW plans were found to be of significance to the sick-listed in adjusting their RTW strategies and achieving a timely RTW [25, 28, 30, 31]. The sick-listed also appreciated close cooperation with the SIOs and this contact being ongoing, meaning that such contact was not typified by long delays, disruptions or frequent changes in contact person [22, 23, 26, 27, 29, 32]. Conversely, not being able to contact the SIO, the SIO not returning calls [22, 24, 29, 32], or frequent contact person changes were referred to as hindering the sick-listed's RTW [22, 24, 29, 32]. A lack of predictability in the contact with the SIOs was also identified as an obstructing factor in some of the studies included [24, 27, 33].

The *measures taken* by the SIO and the demands raised towards the sick-listed were further perceived as affecting the client's RTW process. Well-balanced demands adapted to the individual's situation were emphasised as facilitating, and essential to, the encouragement of the sick-listed [18, 21, 23]. If the measures taken by the social insurance agency, i.e. provision of work training or other vocational rehabilitation measures, were not aligned with the sick-listed's situation and/or needs, such measures could lead to frustration and uncertainty on the part of the sick-listed rather than supporting RTW [25, 31, 32]. The *professional flexibility* of the SIOs was perceived as having an impact on the sick-listed's RTW endeavours. A shorter time on benefit, harsh regulations, and the rigidity of the SIOs' interpretations of rules and regulations were experienced by the sick-listed as delaying RTW [18, 22, 24, 32]. Müssener et al. [18] also found that some of the sick-listed perceived structural aspects of the SIO encounter as difficult and unfair and that SIOs were negatively affected by strict rules and regulations, being pressed for time, and the restricted time limits for receiving sickness absence benefits. *Coordination* among the central actors in the RTW process was also emphasised in several of the studies included. Good coordination was appreciated by participants in several of the studies [19, 23, 31, 32, 34] and, for instance, was found to make the sick-listed feel more confident in the RTW process [31]. A lack of coordination between SIOs and healthcare personnel [23, 26, 31, 32, 35] and between SIOs and the employment service [19, 23, 24, 32] was viewed as a potential obstacle in the RTW process. A lack of

coordination was found to inhibit person-centred services [32] and to be a source of frustration and uncertainty for the sick-listed [24, 27, 33]. For instance, in Eriksson et al. [19], an unemployed sick-listed person describes being shuttled back and forth between the social insurance office and the Employment Service.

Insert Table 2 about here, see end of document

Regarding the interpersonal aspects of the encounter, three factors were identified as being important: feeling respected, feeling supported, and being treated as an individual. *Feeling respected* in the SIO encounter was described in different ways: experiencing the SIO as sympathetic and respectful [18, 24, 26, 31, 32, 35, 36], being listened to and believed in [18, 21, 23, 29, 30, 33–38], and experiencing the involvement and concern of the professional. Experiencing a *lack of respect* was on the other hand be described as feelings of being treated in a negative or unsympathetic manner [24, 32, 33, 39], being questioned, disbelieved, and humiliated [24, 27, 29, 31–33, 39, 40], not being listened to [18, 21], or being treated in an indifferent, nonchalant, or routine manner [24, 32, 33, 39]. Feeling powerless before the Social Insurance Agency was also frequently cited as a negative factor [18, 24, 27, 33, 40]. *Feeling supported* by the professional was emphasised in several studies as important [21, 23, 26–29, 32]. Being treated with confidence by the professional (e.g. the professional believing in the sick-listed's ability to work, supporting the sick-listed's suggestions, and letting them take responsibility within the process) was also identified as facilitative [21, 32]. In contrast, Svensson et al. [39] found that the sick-listed's suggestions being rejected by the SIO was a factor impeding the sick-listed's self-assessed ability to RTW, as it hampered the climate of confidence in the encounter. Lastly, establishing a personal relationship with the SIO and *being treated as an individual* were identified as important factors [18, 21, 23, 26, 29, 31, 32]. Müssener et al. found that having a personal relationship with the professionals and being treated in a personal manner beyond what might be expected from the SIOs was viewed by some participants as confirming and strengthening [18, 21]. Similarly, the lack of an individual approach was perceived as having a negative impact on the RTW process [18, 29, 31, 39].

The findings of the larger quantitative studies included in this review generally support and quantify the above findings. We find that the majority of participants report having positive encounters with SIOs or perceiving the encounter as supportive [35, 37, 41–44]. Regarding the practical aspects, Landstad et al. [41] report that 93.2% of the respondents found the receipt of practical advice from the SIOs to be very or extremely important. Similarly, Nordgren and Söderlund [36] found that having your questions answered was associated with

positive encounters with SIOs, while having the perception that SIOs were violating agreements was associated with a reduced self-assessed ability to RTW. In their study, Olsson et al. [45] found that the sick-listed perceiving demands by SIOs as reasonable was significantly associated with an improvement in their ability to RTW. Regarding the interpersonal aspects, we find that feeling respected [35, 36], listened to [35–37], believed in [35, 37, 38, 42, 45], and supported [38, 45], and being treated in a personal manner [35, 36, 45] are decisive in terms of how the encounter with the SIO is perceived. Furthermore, we find that the sick-listed report that those aspects that are associated with the presence of positive and negative experiences in these encounters are perceived as having an impact on the sick-listed's self-assessed ability to return to work [36–38, 41, 45].

The perspective of the SIO

Thirteen of the included studies addressed the SIO perspective (see table two). In the studies addressing the SIO's experience, four factors were identified as having an impact on the sick-listed's RTW: early contact, stakeholder coordination, difficulties in assessing workability, and contact with the sick-listed. *The SIOs indicated that early contact and initiation of measures were potential facilitating factors in the study by Ahlgren et al. [46].* SIOs argued that establishing early contact with the sick-listed was a critical success factor in reducing sick-leave [46]. Furthermore, Söderberg et al. [20] found that providing the sick-listed with accurate information about rules and regulations, possibilities, and limitations at an early stage could establish confidence and prevent conflict and misunderstanding. Ydreborg [47] also found that, for SIOs, having time was essential in order to be able to see possibilities rather than focus on obstacles to the sick-listed's RTW. However, large workloads were identified as a factor hampering SIOs' efforts to initiate early and frequent contact with the sick-listed [46–48]. Secondly, *coordination* among the different actors, such as the Employment Service and healthcare personnel, was highlighted as having an impact on RTW. Cooperation between the Social Insurance Agency and the Employment Service was identified as problematic because of the agencies' different specialisations [19, 46, 49]. Differences in the professionals' understanding of workability were found to cause an increased risk of the long-term sick-listed and unemployed being shuttled back and forth between agencies, and being assessed as not eligible for receiving sickness insurance by the SIOs and as unfit to be a job seeker or to participate in vocational rehabilitation by the Employment Service [19, 20, 49, 50]. Söderberg et al. [20] found that increased collaboration between the Social Insurance Agency and the Employment Service may facilitate more frequent contact with the client and create better grounds for mobilising the strengths and abilities of the sick-listed. Also, closer interaction may promote shorter and less

passive waiting times for the sick-listed and enable professionals to spend less time on desk work, such as writing referrals to convey information between agencies [20]. Good cooperation with the sick-listed's physicians was also highlighted as crucial to the SIOs' work [51, 52]. Physicians are the most important source of information about the sick-listed's health. However, cooperation was found to be difficult due to the actors' different understandings of workability and the rules, regulations, and guidelines that the actors must follow [30, 49, 52–54]. Their study further highlighted that many physicians' lacked knowledge about the sick-listed's occupation, which leaves room for subjectivity in workability assessments and makes it more challenging to validate the existence of relevant disease or injury [20, 50, 53]. Furthermore, unclear diagnosis and insufficient information on the medical consequences of conditions make decision-making difficult for SIOs and can cause delays in the RTW process [49, 51–53]. Hence, *difficulties in assessing workability* were identified as a factor that has an impact on RTW. According to the SIOs, a lack of objective medical findings makes it difficult to verify if an illness is the reason for reduced workability, which makes the judgment of whether the sick-listed person meets the requirements for sick-leave benefit more problematic [50, 51]. This gatekeeping role was described as demanding because the SIOs are to help those in need while also being responsible for ruling out those without legitimate reasons for sick-leave [51]. In addition, SIOs find that workability assessments are complicated by a lack of knowledge about the sick-listed's working conditions [50]. Ahlgren et al. [46] found significant differences in SIOs' attitudes regarding individuals' opportunities to work despite minor ailments and differences in whether a given functional status implied reduced workability. SIOs further found that *contact with the sick-listed* was more challenging in cases where the sick-listed lacked insurance knowledge and where there was a gap between the sick-listed's expectations of what the insurance agency could provide and what the insurance agency actually could offer to the sick-listed [48, 51, 53]. Contact was also found to be demanding in cases where it was unclear whether the sick-listed was eligible to receive sickness absence benefit, as the work was found to be more time-consuming, and in these cases the sick-listed typically stayed longer in the sickness insurance system [51]. Having to explain insurance rules to the sick-listed was described as both demanding and time-consuming [53], and SIOs more frequently had to question, or negotiate with, sick-listed persons who had an unclear diagnosis such as a musculoskeletal disorder than with persons sick-listed for other conditions [51]. However, in Ståhl et al. [55], SIOs found that techniques such as Motivational Interviewing could be useful to a certain degree in communicating with clients, as this was found to help SIOs listen and could make meetings more dialogue-oriented.

Discussion

This review's main findings are that the majority of the sick-listed perceived the encounters with SIOs as positive [35, 37, 41–44] and that the research into the encounter between the sick-listed and SIOs within the Scandinavian sickness insurance context predominantly represents the perspective of the sick-listed. The majority of the studies included focus on the sick-listed's experience in the encounter with RTW professionals. From the perspective of the sick-listed, we find that feeling respected [18, 24, 26, 31, 32, 35, 36, 53], listened to, and believed in [21, 23, 29, 30, 33, 35, 37, 38, 40], and feeling emotionally supported by the professionals [18, 21, 23–29, 32, 38, 41, 45, 56], or not feeling this way, is emphasised as being important in the RTW process. We also found that the sick-listed responded that they have perceived the presence of positive and negative experiences in these encounters as having an impact on their self-assessed ability to RTW [36–38, 41, 45]. Articles addressing the SIO perspective more often addressed factors related to the encounter, such as SIOs' cooperation with stakeholders [19, 20, 52, 54], policy change [48–50], and the subsequent impact on SIOs' working conditions. One of the studies included aimed to shed light on SIOs' experience of facilitating the RTW of sick-listed workers [51]. The predominance of studies addressing the sick-listed's perspective (71% and the thematic distribution indicate that the SIO perspective has been studied less in the given context. The relatively few studies addressing the SIO perspective and the lower number of participants in the SIO studies indicate that the results from the sick-listed perspective might be more trustworthy and more in line with the actual situation than the results from the SIO perspective.

Previous reviews of RTW coordination have focused primarily on the effect of RTW coordination programmes and the roles, actions, and competencies of RTW coordinators [6, 8, 11, 12, 57], and relatively little attention has been paid to either the sick-listed or the RTW coordinators' experience of interactions in the RTW process. In a review investigating interactions between workers and insurers in workers compensation systems, Kilgour et al. [58] found that injured workers, many of whom had long term claims, experienced most of their interactions with insurers as negative and that involvement in compensation systems could contribute to negative consequences for claimants [58]. Our review complements the existing research by shedding light on RTW coordination within the Scandinavian sickness insurance context from both the SIO and sick-listed perspectives. In contrast with Kilgour et al. [58], our review finds that the majority of the sick-listed perceived the encounters with SIOs as positive [35, 37, 41–44]. The opposition in the results can likely be interpreted considering variables such as the nature of the compensation systems and the complexity of illness or injury of

the individuals in question. In the Scandinavian countries, welfare systems are comprehensive, implying that individuals are insured regardless of the cause of the illness/ injury. In contrast, workers' compensation programs often are contingent upon work disability being causally related to the workplace. Further, the studies included in Kilgour et al.'s [58] review are mostly based on long term claimants' experiences, indicating that the workers might have more complex medical cases and hence might be more prone to confrontational interactions in the RTW-process [59]. The findings from the current review, e.g., the importance of being listened to and believed in, and perceiving contact with SIOs as respectful and supportive, adds to previous findings indicating the importance of the quality of the interactions between sick-listed and stakeholders in promoting RTW [13].

Another key finding of this review is the challenges posed by the stakeholders' differing understandings of the term *workability*. Physicians are expected to have a strong focus on the sick-listeds workability when issuing sickness certificates. However, despite efforts to progress the handling of workability assessments, such as by implementing training, guidelines, and standardised methods, research literature still reports that the process and cooperation between physicians and SIOs are beset with tension [60, 61]. Differing understandings of workability are problematised by the sick-listed [19, 23, 24, 33], by SIOs in respect of their interactions with healthcare personnel [30, 49, 51–54], and the Employment Service [19, 20, 46, 49]. The stakeholders' different aims, motivations, and specialisations have been found to create gaps in how the parties understand workability. For instance, SIOs and physicians typically favour different medical frameworks. Where SIOs are obliged by law to use the biomedical framework, physicians typically adopt the biopsychosocial framework, which includes broader social factors [61, 62]. In a previous review of SIO practices, Söderberg and Alexanderson [57] found that SIOs felt unsure about how to handle benefit eligibility assessments and contact with other public organization staff. Consequently, SIOs reported accepting physicians' recommendations rather than using their own judgment. This review did not make a similar finding, however we find that SIOs use their judgments and agency in that they report lacking or scarce medical information as a challenge [49, 51–53], and that the SIOs question physicians knowledge of the sick-listeds occupation and work situation, and hence their prerequisites for conducting relevant assessments according to the sick-listeds workplace [20, 50, 53].

We further find that SIOs report experiencing professional differences between the physicians and SIOs to complicate stakeholder cooperation, potentially causing delays in the RTW process by creating longer waiting times [49, 51, 52], increasing the risk of the long-term sick-listed and unemployed sick-listed being shuttled back and forth between the Employment Service and Sickness Insurance [19, 20, 49, 50], and causing frustration and uncertainty for the sick-listed [30, 31]. The findings related to difficulties in conducting workability assessments align well with the research in a wider international context. Internationally, sickness certification and cooperation between the different stakeholders in the sick-leave process is often characterized as challenging by physicians [61, 63], and there is not yet any consensus on how to define workability [64]. However, in their review of primary care physicians' attitudes and experiences with sick-leave, Aamland and Mæland [61] criticize the research literature's orientation towards problematic sick-leave cases and call for more research-based knowledge on successful follow-up processes in sick-leave.

Future research

Investigating experiences can provide us with general information on factors that are perceived as positive and negative by the sick-listed and the SIOs. In this review, literature published in Scandinavian languages was not considered. Future reviews on the topic might therefore include Scandinavian literature and grey literature. It might also be of interest to compare sick-listed experiences of encounters with their certifying physician to the results from this scoping review. Further, the relatively few studies from the SIO perspective also suggest that future studies should pay more attention to the SIO perspective in encounters between sick-listed and SIOs. Last, social security systems vary between countries, and over time and so do the SIOs practices. As providers of public policy SIOs are affected by variations in prevailing regulations, political goals, and the arrangement of the welfare organizations. A wider comparison across time and countries of encounters between sick-listed and SIOs or related case managers would therefore be interesting.

Strengths and limitations

A strength of this study is the inclusion of both sick-listed and SIO perspectives. The two perspectives yield complementary information and a better understanding of factors related to the encounters that are suggested to have an impact on RTW. A second strength of this study is the transparency of the review provided through the systematic reporting of procedures and results. The main limitation of this study is that, despite our efforts to conduct a comprehensive search and identify as many relevant articles as possible, it is

unlikely that we have been able to identify all relevant articles. Furthermore, in the analysis of the articles included, we have not distinguished between length of sick-leave and employment status of the sick-listed. This is a limitation as the duration of sick-leave and whether one has an employer to return to may potentially have a significant impact on the sick-listed's prospects for returning to work, as well as on aspects related to assessments by, measures taken by, and encounters with SIOs. Another limitation of this review is that some of the studies included do not distinguish between encounters with healthcare personnel and SIOs. This generalisation of professionals could hinder a nuanced interpretation and description of the specific factors in interactions between SIOs and sick-listed individuals.

Conclusion

The main finding of this review is that most of the sick-listed had experienced their encounters with SIOs as positive. This review further suggests that the research focus in studies of sick-listed' and social insurance officers' encounters within a Scandinavian sickness insurance context predominantly represents the sick-listed perspective. The research focus has mainly been centred on the sick-listed's perceptions of professional encounters in the RTW process. We find that both interpersonal and practical aspects of this process influence the sick-listed's perception of SIO encounters. The sick-listed have responded that they have perceived the presence of positive and negative experiences in these encounters as having an impact on their self-assessed ability to RTW. We further find that SIOs experience challenges in performing workability assessments, especially in cases where objective medical information is scarce or when gaps in stakeholders' understanding of workability complicate stakeholder cooperation. The findings of this review also suggest that future studies should pay more attention to the SIO perspective in encounters between sick-listed and SIOs.

List of abbreviations:

LTSL: Long-term sick-leave

RTW: Return to work

SIO: Social Insurance Officer

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Table 1 Characteristics of the included studies addressing the sick-listed perspective

Articles addressing the perspective of sick-listed							
First author, year of publication, country	Study population of the study	Study population employment status	Age range	Study purpose	Type of data used and analytical methods	Analytical method	Sample size sick-listed**
Andersen (2014), Denmark [31]	Sick-listed, cognitive mental disorders (CMD)	Employed at recruitment	23-61	Investigate experiences of participating in an RTW intervention, how activities influenced the RTW process, and working mechanisms of the interventions	Individual interview	Interpretive phenomenological analysis	17 (93 invited, 1 dropped out)
Andersén (2017), Sweden [23]	Sick-listed (>180 days), all diagnosis	N/A	27-59	Investigate clients' experiences with an individually tailored vocational rehabilitation and the encounters with professionals	Individual interview	Inductive content analysis	14 (N/A)
*Eriksson (2008), Sweden [19]	Sick-listed (>29 days), stress-related or musculoskeletal diagnosis (MSD)	Unemployed	N/A	Explore factors behind the weak cooperation between local SIOs and unemployment agencies	Individual interview	Grounded theory	14 (N/A)
Foldal (2020), Norway [25]	Sick-listed (>8 weeks), all diagnosis	Employed	33-60	Explore sick-listeds' experiences with motivational interviews in the RTW process.	Individual interview	Systematic text condensation	16 (29 invited, 13 dropped out)
Holmgren (2016), Sweden [24]	Individuals who had applied for sickness absence benefit, all diagnosis	Employed and unemployed	24-61	Explore how experience with health insurance influence confidence in the Swedish Social Insurance Agency	Group interview	Thematic content analysis	41 (invited N/A, 21 dropped out)

Hubertsson (2011), Sweden [27]	Sick-listed, <6 months, MSD	Employed and unemployed	33-63	Study contact with social insurance agency and health care system, and obstructing or facilitating factors for recovery and RTW	Individual interview	Inductive content analysis	15 (invited N/A, 1 dropped out)
Landstad (2009), Norway [41]	rehabilitation allowance recipients in 2002, mental illness or MSD	Employed and unemployed	N/A	Investigate long term sick workers experiences of professional support for re-integration for work.	Questionnaire	Logistic regression analysis	740 (1493 invited)
Lynöe (2013), Sweden [37]	Sick-listed, 4-8 months, all diagnosis	Employed and unemployed	20-64	Explore encounters with SIO staff and the impact of these encounters in self estimated ability to RTW	Questionnaire	Analysis of proportions and attributable risk	5802 (10,042 invited, internal drop out 231)
Lännerström (2013), Sweden [33]	Sick-listed >3 months, all diagnosis	Employed and unemployed	31-64	Describe, analyse and understand experiences of being sick-listed	Individual interview	Phenomenological analysis	16 (37 invited, 1 dropped out)
*Martin (2012), Denmark [30]	Sick-listed >4 weeks, who had participated in an RTW intervention, mental health problems	Employed	20-60	Elucidate the implementation process and identify barriers to the feasibility and sustainability of the RTW intervention	Questionnaire, individual interview	Quantitative analysis of questionnaire, thematic analysis of interviews	Baseline 76 (72% response), follow-up 53 (50 % response of total sample) 10, 106 invited
Müssener (2007), Sweden [21]	Sick-listed (>90 days), all diagnosis	Employed	28-59	Analyse experiences of positive encounters with professionals within sickness insurance and health care	Individual interview	Inductive, descriptive qualitative approach	11 (31 invited, drop out N/A)
Müssener (2008), Sweden [35]	Sick-listed 6-8 months, all diagnosis	N/A	20-64	Analyse different aspects of positive experiences of LTSA regarding interactions with health care personnel and SIOs.	Questionnaire	Factor analysis and Logistic	5802 (10,042 invited, response per

Müssener (2015), Sweden [18]	Sick-listed >28 days, all diagnosis	Employed and unemployed	29-59	Gain understanding of sick-listeds perceptions of encounters with professionals, and how encounters affect ability to RTW and attitudes towards the sickness insurance system	Individual interview	Inductive thematic approach	20 (30 invited, dropout N/A)
Mårtensson (2012), Sweden [26]	Women, Sick-listed during the previous 12 months, all diagnosis	Employed and unemployed	26-63	Explore and describe women's experiences of factors that contribute to their ability to make informed decisions about the process of rehabilitation and RTW	Group interview	Thematic analysis	19 (N/A)
Nielsen (2013), Denmark [44]	Individuals applying for sickness absence benefit, CMD	Employed	N/A	Examine how workers with CMD assess encounters with RTW stakeholders, including examining gender differences	Questionnaire	Logistic regression analysis	Baseline 298 (41% response rate) follow-up 226 (76% response rate), 721 invited
Nilsson (2011), Sweden [22]	Women treated for breast cancer, undergone surgery 3-13 months prior to the interviews	Employed prior to diagnosis	20-63	Gain knowledge about experiences of encounters regarding RTW after breast cancer surgery	Group interview	Qualitative content analysis	23 (59 invited, drop out N/A)
Nordgren (2015), Sweden [43]	Sick-listed, average 61 weeks, heart failure	N/A	23-67	Investigate association between self-rated health, mood, socio-demographic factors, sick-leave compensation, encounters with healthcare personnel and SIO and self-estimated ability to RTW.	Questionnaire	Descriptive statistics, bivariate analysis, and logistic regression	590 (1287 invited, drop out N/A)

Nordgren (2016A), Sweden [36]	Sick-listed, average 61 weeks, heart failure	N/A	23-67	Investigate associations between encounters and socio-demographic factors and encounters and self-rated ability to RTW.	Questionnaire	Bivariate analysis and logistic regression	590 (1287 invited dropout N/A)
Nordgren (2016B), Sweden [38]	Sick-listed, average 61 weeks, heart failure	N/A	23-67	Investigate experiences of positive/ negative encounters with SIOs, self-estimated ability to RTW, and associations between socio-demographic factors	Questionnaire	Bivariate analysis and logistic regression	590 (1287 invited, dropout N/A)
Norlund (2013), Sweden [28]	Sick-listed <12 months, referred to a stress rehabilitation Clinique due to burnout	Employed	25-61	Explore experiences and thoughts in the process of RTW in employed patients with exhaustion disorder	Individual interview	Grounded theory	12 (24 invited, dropout N/A)
Ockander (2001), Sweden [40]	Women with experience of LTSA (>60 days), all diagnosis	Employed and unemployed	30-49	Describe explanations of how LTSA arises and becomes permanent.	Individual interview	Phenomenological analysis	82 (100 invited, dropout N/A)
Ockander (2005), Sweden [34]	Women with experience of LTSA (>60 days), all diagnosis	Employed and unemployed	30-49	Describe perceptions of how to avoid extended sickness absence	Individual interview	Phenomenological analysis	82 (100 invited, dropout 18)
Olsson (2016), Sweden [45]	Sick-listed, 6-8 months, all diagnosis	N/A	20-65	Identify specifically what positive encounters are important for promoting ability to RTW	Questionnaire	Various statistical analysis (e.g. logistic regression)	5802 (10,042 invited, dropout N/A)
Porter (2018), Sweden [32]	Individuals with affective disorders, including depression and bipolar disorder	Unemployed	18-63	Explore factors of importance for unemployed with depression in their RTW-process, and the impact of two vocational approaches on service users' experiences	Individual interview	Manifest content analysis	16 (31 invited, dropout N/A)

Svensson (2003), Sweden [39]	Sick-listed, back diagnosis	Employed	N/A	Investigate negative emotions experienced by individuals on sick-leave in their interactions with rehabilitation professionals	Group interview	Explorative and descriptive qualitative approach	18 (63 invited, dropout 15)
Upmark (2011), Sweden [42]	Sick-listed, 6-8 months, all diagnosis	N/A	20-64	Gain knowledge about experiences of negative encounters with SIOs.	Questionnaire	Logistic regression analysis	5802 (10,042 invited, dropout N/A)
Östlund (2001), Sweden [29]	Experience of being sick-listed, MSD	N/A	35-47	Explore the layperson's perspective on the rehabilitation process.	Individual interview	Data-driven content analysis	20 (N/A)

*Articles address both the sick-listed and SIO perspective. See also table two

** Number of sick-listed in each study reported. Some articles also include data on other groups

Table 2 Characteristics of the included studies addressing the SIO perspective

Articles addressing the perspective the SIOs					
First author, year of publication country	Study population of the study	Study purpose	Type of data used	Analytical method	Sample size SIO **
Ahlgren (2008), Sweden [46]	SIOs working with vocational rehabilitation	Evaluate differences between local social insurance offices regarding selection for vocational rehabilitation	Questionnaire	Statistical and descriptive analysis	30 (36 invited, response rate 83%)
*Eriksson (2008), Sweden [19]	SIOs (n=6), Public Employment Service caseworkers (5), and physicians (n=14), unemployed (=14)	Explore factors behind the weak cooperation between local SIOs and unemployment agencies	Individual interview	Grounded theory	6 (N/A)
Lindqvist (2018), Sweden [49]	SIOs (n= 15) and Employment Service caseworkers (n= 9)	Explore characteristics of activation strategies in Swedish Sickness Insurance and its consequences for social workers	Group interview	Content analysis	15 (N/A)
Løchting (2020), Norway [51]	SIOs with experience of working with sick-listed due to MSD	Describe SIOs experiences of the RTW process for people sick-listed with MSD	Group interview, questionnaire	Thematic analysis, statistical and descriptive analysis	6 (8 invited), 61 (55% response)
*Martin (2012), Denmark [30]	SIOs responsible for recruiting participants to RTW intervention	Elucidate the implementation process and identify barriers to the feasibility and sustainability of the RTW intervention	Group interview	Thematic analysis	3 group interviews (N N/A)
Ståhl (2009), Sweden [54]	Interdisciplinary teams including SIOs and physicians (66)	Investigate relationships between professionals in Swedish interdisciplinary rehabilitation teams and determine definitions and uses of workability as a concept	Group interviews and individual interviews	Qualitative content analysis	N/A

Ståhl (2011), Sweden [50]	SIOs (n=4), other rehabilitation professionals (n=11)	Analyse perspectives on how changed regulations affect practice, with special focus on workability assessments	Group interview	Inductive content analysis	4 (N/A)
Ståhl (2018 A.), Sweden [48]	SIO's (n=24), coordinators (n=4), managers (n=20), senior managers (n=9) in the Swedish sickness insurance agency	Analyse changes in managerial principles within the Swedish sickness insurance Agency, and how this has influenced the role of SIOs	Individual interviews	Qualitative content analysis	24 (N/A)
Ståhl (2018 B.), Sweden [55]	SIO's (n=40), coordinators (n=4) and managers (n=25) in the Swedish sickness insurance agency	Investigate experiences of introducing motivational interviewing as a tool to promote RTW	Individual interview	Qualitative content analysis	40 (N/A)
Söderberg (2008), Sweden [53]	SIOs working with sickness insurance	Gain knowledge of the problems experiences by SIOs in their work associated with entitlement to sickness absence benefit	Group interview	Descriptive and qualitative analysis	12 (14 invited, dropout N/A)
Söderberg (2010), Sweden [20]	SIOs (n=7) and Public Employment Service caseworkers (n=7) participating in cooperative projects	Gain understanding on experiences of professionals involved in cooperative projects promoting RTW among unemployed sick-listed	Individual interview	Hermeneautic-phenomenological analysis	7 (N/A)
Thorstensson (2008), Sweden [52]	SIOs working with sickness insurance	Describe variations in how SIOs conceive the cooperation with healthcare in their daily work	Individual interview	Phenomenographic analysis	15 (N/A)
Ydreborg (2008), Sweden [47]	SIOs working with eligibility assessment	Describe SIOs experiences of working conditions when dealing with applications for disability pensions	Individual interview	Inductive content analysis	10 (N/A)

relating to disability
benefit

*Articles address both the sick-listed and SIO perspective. See also table one

** Number of SIOs in each study reported. Some articles also include data on other groups

Appendix 1: Literature search strategies

Database	Search strategy
MEDLINE CINAHL SocINDEX Academic Search Premier	<p>S1: AB "return to work" or "return-to-work" or rtw or "return to employment" or "back to work" or "work resumption" or "work re-entry" or "back to work"</p> <p>S2: AB coordinator* or professional* or agent* or "social worker*" or "social insurance*" or SIO or "disability case manager" or "case manager" or "case worker*"</p> <p>S3: S1 AND S2</p> <p>S4: AB "job absenteeism" or "sick leave" or "sickness absence" or absence or "work disability" or absenteeism or "sick pay" or "disability pension" or "work assessment allowance" or "long-term sickness absence"</p> <p>S5: S3 AND S4</p> <p>S6: Limiters - Full Text; Scholarly (Peer Reviewed) Journals; Published Date: 20000101-; Language: English</p>
PsycINFO EMBASE	<ol style="list-style-type: none"> 1. ("return to work" or RTW or return-to-work or "work resumption" or "work re-entry" or "back to work" or reemployment). ab. 2. (coordinator* or professional or agent* or "social worker*" or "social insurance" or SIO or "disability case manager" or "case worker").ab. 3. 1 and 2 4. ("job absenteeism" or "sick leave" or "sickness absence" or absence or "work disability" or "sick pay" or "disability pension" or "work assessment allowance" or "long-term sickness absence" or absenteeism).ab. 5. 3 and 4 6. limit 5 to English language 7. limit 6 to yr="2000 -Current"

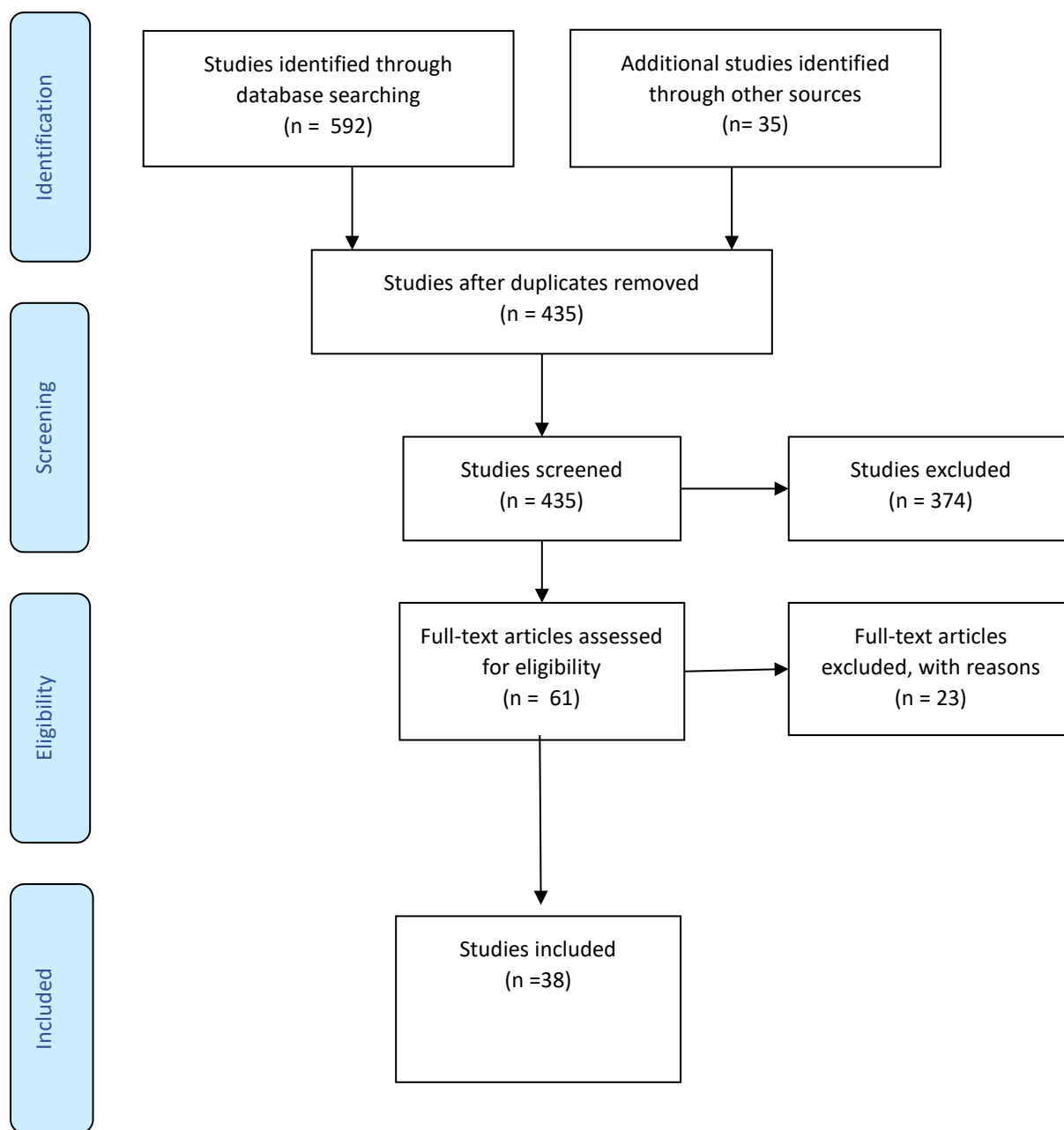


Fig. 1 PRISMA flow chart of study identification and selection process