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Occupational therapists' competencies utilized in Danish job centres

[Jeanette Reffstrup Christensen^{1*}, Linda Trier Hald²,](#)

[Tove Lise Nielsen³, Thivya Nagaraj-Sithamparanathan¹, Pia Maria Ilvig¹](#)

1. The Research Initiative for Activity Studies and Occupational Therapy, The Research unit for General Practice, Department of Public Health, University of Southern Denmark, JB Winsløvsvej 9a, 5000 Odense, Denmark.

2. Department of Occupational Therapy, VIA University College, Gl. Struervej 1, 7500 Holstebro, Denmark.

3. Department of Occupational Therapy, VIA University College, Hedeager 2, 8200 Aarhus N, Denmark

*Correspondence should be addressed to

[Jeanette Reffstrup Christensen](#)

Email: jrchristensen@health.sdu.dk

Phone: 0045 93507088

Abstract

Background: Twenty-nine out of 94 Danish job centres employ occupational therapists (OTs) and numbers are increasing. Occupational therapy (OT) vocational rehabilitations are diverse, and a more specific description of OT practice within this field is lacking.

Aims: To explore how OTs employed at Danish job centres describe their own competencies and what they perceive that their colleagues from other professions request from them.

Material and Methods: Firstly, working diaries were obtained from 16 OTs working in job centres and analysed using content analysis. Secondly, semi-structured interviews were performed and analysed using systematic text condensation.

Results: The 16 OTs described four areas of competencies to their profession's practice within job centres; client-centeredness; a holistic approach; work ability assessments and ergonomics and adaptation. The OTs perceived that their colleagues requested their work ability assessment skills and their competencies as health professionals.

Conclusion: The OTs had a client-centered and holistic focus on the citizens' whole life situation and used their health professional education and knowledge of ergonomics and adaptation to strengthen their work ability assessments.

Significance: The OTs perceived that they had competencies that supplemented the competencies of the interdisciplinary team. The results therefore support the inclusion of OTs within job centres.

Keywords: Client-centeredness; ergonomics; holistic approach; vocational; work ability assessment; work rehabilitation.

Background

The Danish government supports citizens financially during periods of long-term sick leave, which imposes substantial societal expenditure (1). In Denmark, employment policy has gone through several reforms to create coherent employment initiatives aimed at helping citizens on long-term sick leave due to all kinds of physical, mental and social disabilities (such as having difficulties engaging with other people or being close to others) to stay connected to the labour market and to regain and maintain financial independence in the long-term (2, 3). Fundamental assumptions and features of recent national policies as well as conceptual foundations and research within occupational therapy (OT) show that having a job is an important prerequisite for financial security, personal identity, and quality of life (2, 3). It is stated that the citizens' resources, rather than their limitations, should be in focus when helping the citizens to increase their work ability and support their return to the labour market (2, 3). The Danish *Reform of the Sickness Benefits Scheme* from 2014 offers citizens on sick leave an early and targeted intervention to facilitate a quicker return to work and to prevent long-term sick leave (2). The intervention is aimed at compensating for limitations in the citizens' work ability and may include mentor support, assistive devices, new work tools, and workplace reorganisation (4, 5). In addition, all municipalities in Denmark must establish interdisciplinary rehabilitation teams at their job centres to handle vocational rehabilitation programmes, the so-called *flexi-job* schemes as part of a coordinated and coherent intervention for citizens on long-term sick leave (2, 6). Citizens can require a long-term sick period due to accidents, injuries or sudden illness but citizens with more chronic disabilities, who normally are able to work, can also fall long-term sick. The job centres require professionals qualified to analyse the interaction between the individuals, the work environment and the work activities (1).

In recent years, more occupational therapists (OTs) are being employed at Danish job centres. This is supported by international research showing that OT has had a positive influence on keeping people connected to the labour market and helping them to return to work (7-9). OTs typically collaborate with other professions, such as social workers or pedagogues in the job centres, to create a complete evaluation of the citizens' work ability and the influence the work environment has on the citizens' engagement in work activities (10). OTs are qualified to enable citizens to perform meaningful activities in their daily lives, including work activities (11). In order to help citizens, engage in the part of the daily life that is fulfilling a work task, the OTs conduct work ability assessments and assess the citizen's need for assistive devices and other compensatory welfare technologies in all workplace settings (11). Furthermore, OTs in Denmark are normally involved in all rehabilitation related to everyday life activities when citizens' occupations and engagement are limited (12). This aims at enabling engagement in all everyday life aspects to the citizens' full potential (12). In general, the OT work process contains assessment, activity analysis, goal setting, intervention, and evaluation (13). Despite the increasing number of OTs employed at job centres in Denmark, it has not been explored which special competencies (knowledge, skills, and abilities) the OTs contribute with in the interdisciplinary rehabilitation teams in this setting, and why their colleagues from other professions may find the OTs' collaboration useful to the rehabilitation teams. An explicit description of good OT practice in vocational rehabilitation in Denmark (focusing on citizens on long-term sick leave or still on short-term sick leave but at risk of being long-term sick and with the aim of job retention or return to work after long-term sickness) is not available (7). According to experienced OTs working in the specialised field of vocational rehabilitation, OTs should be aware of their own practice by re-examining the traditional methods within vocational rehabilitation with the purpose of improving their occupational therapy practice (9). The present study is expected to contribute

with knowledge and may fuel discussions and professional development in Denmark as well as internationally.

Thus, the aim of this study was to explore which OT competencies the OTs use at Danish job centres and to gain knowledge of the OTs perceptions of which competencies their interdisciplinary colleagues request from them.

Material and methods

Study design

An explanatory sequential mixed methods design was used to explore the aims of the study (14). Firstly, to create an overview of tasks performed by OTs employed at Danish job centres, the participating OTs filled out a five-day work diary. Secondly, to get more specific descriptions of the OTs' competencies, they were interviewed using a hermeneutical approach based on the tasks reported in the work diaries.

Recruitment process

Among the 94 job centres in Denmark, 29 employed one or more OTs (10). OTs (full or part time employed) from these 29 job centres were recruited for the study using two different approaches. Firstly, all 94 job centres were contacted twice by email or phone to identify which centres employed an OT and to recruit the OTs to the present study. Secondly, to try to secure that all OTs employed in these job centres were invited to participate in the study, a board member of the professional network for OTs specialised in vocational rehabilitation, recruited the rest of the OTs relevant to the present study if they were listed as members of the professional OT network and not already invited. 15 job centres with employed OTs responded positively to the invitation. OTs who did not respond to the invitation after two contact attempts were not contacted further.

Data collection

The data, which was used to qualify the interview guide, was gathered using a five-day work diary, which the OTs filled out and emailed to the research group. The diary was structured as a five-day template and allowed the OTs to describe their tasks for each workday, in 1-hour increments (Appendix 1). The diaries were filled out between January and February 2017. Based on the five-day work diaries a qualitative semi-structured interview guide was developed by two authors (LTH and JRC). The semi-structured interviews were conducted to explore which OT competencies the OTs used within vocational rehabilitation at job centres in Denmark and which competencies they experienced that their job centre colleagues with other professional backgrounds requested from them (15). The interview guide was divided into four parts. The first part consisted of introductory questions including age, job title, weekly work hours, seniority, employment at the job centres and the organization of the department. The second part was about the OTs' work tasks. As an introduction to this part, the OTs were asked to tell about the five-day work diary they had filled out and submitted prior to the interview. The third part of the interview was about how the OTs applied and included OT theory and OT competencies in their daily work at the job centres and which OT competencies they used the most or found most valuable. The fourth and final part of the interview concerned which OT competencies that the OTs experienced their job centre colleagues requested from them (the interview guide can be seen in full in Appendix 2). The five-day work diary and the interview guide were pilot tested with an OT from a job centre; this led to a single correction in the interview guide.

The Danish Data Protection Agency was contacted and they informed that their approval was not required to conduct the present study (16). Prior to the interviews, the OTs received a letter with information about the purpose and content of the study. The OTs were informed that their diary and interview would be handled confidentially in the study and that their data could be withdrawn from the study at their request at any time, with no need for

clarification. When the OTs returned the diaries by email, they also returned a signed consent to participate in the study. All interviews were performed in 2017 between March and April and the data from the pilot test was included in the analyses. The OTs decided the date, time and location of the interview and all, but two interviews took place at the OTs' workplaces. The last two interviews were carried out as video interviews using Facetime. All interviews lasted between 30 and 45 minutes and were conducted by the same researcher (LTH). The interviewer used follow-up questions to help the OTs elaborate on their answers in order to get a better understanding of the OTs' perspectives (17). The interviews were audiotaped and transcribed by the interviewer; afterwards, the OTs were offered the possibility of reading their transcription and to make corrections (18), however, none of the OTs made any corrections.

Data analysis

To get an overview, the contents of the five-day work diaries were analysed using a data driven quantitative content analysis focusing on the manifest content (19). Task categories were identified independently by two authors (LTH and PMI). In case of discrepancy, the first author (JCR) was consulted and consensus was reached (19). Descriptive statistics was used to describe the quantifiable characteristics of the OTs (mean and range). Only the work diaries of the 16 OTs that also participated in the interviews were detailed enough to be included in the analysis.

To understand the OTs' perspectives, the qualitative analysis of the interviews was conducted using Malterud's systematic text condensation, which is a descriptive and explorative step-by-step method for analysing qualitative data (17, 18). Two different analyses were conducted; first, on the OTs' perspectives of their own competencies within vocational rehabilitation, and second on which competencies the OTs found that their job centre colleagues with other professional backgrounds requested from them. The procedure consisted of the following

steps: 1) total impression and identification of themes; 2) identification and sorting of meaning units, developing from themes to codes; 3) condensation, going from code to meaning; and 4) synthesizing condensations, developing descriptions and concepts. The analysis was data-driven and quotations from the OTs were used to support the study's findings (18). After the analysis was finished, a native English scientific writer who, also speaks an excellent Danish, translated the quotations from Danish into English.

Results

Characteristics of the OTs

Twenty-one OTs from 15 different job centres completed and returned their five-day work diaries. Five of these were excluded, because the OTs were not permanently employed at a job centre but were occasionally called to the job centres from other divisions in the municipalities to carry out specific tasks. The remaining 16 OTs were interviewed; their characteristics are displayed in table 1.

Table 1. Characteristics of the occupational therapists

n = 16	Mean (range)
Age (years)	45.4 (33-62)
Seniority (years)	16.2 (1-36)
Employment at job centres (years)	6.1 (1.3-11.5)
Weekly working hours	34.9 (22.5-37)

The OTs' competencies

The competencies used by the OTs at the job centres as well as the competencies the OTs reported as requested by their colleagues were explored through semi-structured interviews. Four main themes occurred when the OTs described the competencies, they used at the job centres; 1) a client-centered perspective; 2) a holistic approach; 3) work ability assessments; and 4) ergonomics and adaptation of the working environment. Two main themes occurred

when the OTs described which competencies, they most often experienced that their colleagues requested from them; 1) their education as health professionals and 2) their competencies concerning work ability assessments.

Competencies used by the OTs at the job centres

Working from a client-centered perspective

The OTs at the job centres stressed how they achieved good partnerships with their clients and always included them in the vocational rehabilitation process. They told that this was how they were working from a client-centered perspective, and they highlighted that this approach was unique and fundamental in their work as OTs.

'Particularly, being an OT and to achieve a good partnership with the client. And especially, to take that partnership as a starting point. The feedback I receive from the citizens is that they feel accommodated in another way. They feel seen and heard. I think it is a very basic way of thinking when you are an OT'.

The OTs found that they, to a higher degree than their job centre colleagues, involved the citizens in the vocational rehabilitation process to bring back their autonomy and ownership.

'When you skip that step, you will not inspire the citizen to pursue subsidiary goals by themselves'.

The OTs focused on the citizens' uniqueness, which lead them to explore the reasons behind the citizens' disabilities and why they could not participate in certain activities.

'We contribute to the citizens' own perspectives of themselves. [...] It is the individual descriptions, the individual wishes, the individual needs, which we are capable of describing as OTs, and which are not incorporated in all the other standardized assessments'.

Using their theoretical knowledge about the 'zone of proximal development'(20), the OTs identified which occupations were important to the citizens, created an overview of where

they could intervene to best help the citizens and showed the citizens how they could improve.

'They feel appreciated, heard and understood. The citizens get a positive experience when meeting the system, which is not always the case. The citizens are grateful for the visit when I leave, because they feel accommodated and heard. There is no doubt about that. I am sure that is what we [as OTs] are good at.'

Taking a holistic approach

The OTs expressed that they had a holistic view and focused on both physical, mental, and social aspects of the citizens' situation. The OTs were knowledgeable about how different aspects interacted with the citizens' ability to work. Thereby, the OTs included all aspects of the citizens' life situation in their intervention.

'As an OT, I am fundamentally keen on what it takes for people to succeed in their work life and at their workplace. And to do that you also need to look into peoples' private life. It takes a holistic way of thinking.'

When the OTs were involved in the vocational rehabilitation of the citizens with the goal of helping them to return to the labour market, the aim was to enable the citizens to participate in their everyday life, including work activities.

'I look at the whole person and all that surrounds them [the citizens], whereas they [the colleagues with another education] mainly focus on the person in regard to the workplace. Their [the colleagues with another education] task is to make the citizen return to work. This is my task too, but my task is also to empower the citizen in order to make it possible for the citizen to return to work and to stay employed. I am focused on the process to reach the goal - to enable the citizens return to work. And I think we are very good at it - as OTs. It's all about seeing the person as a whole. We need to go all the way around the person. Sometimes, we talk about how they manage at their home, how they manage their everyday activities and

how they are able to manage their work activities, in order to return to work after being on long-term sick leave’.

Citizens with prolonged time away from the labour market received an OT intervention which was categorized as rehabilitation. The OT intervention did therefore not solely focus on returning to work. The OTs told that this target population needed a holistic focus on their life situation and the OTs found that they had the competencies to provide this, as described in this quotation:

‘I look at the whole person [the citizen] and all that surrounds them, where as they [the colleagues with another education] mainly focus on the person in regard to their workplace’.

[...] ‘Rehabilitation is a new concept within the job centres and was introduced in 2013 by law, and from my point of view there is no one else than OTs in the job centres who know what rehabilitation is all about’.

Work ability assessments

In the rehabilitation team, the OTs contributed with a description of how the citizens were able to perform their work activities. The descriptions could stem from conversations with the citizens or the citizens’ employer, observations of the citizens when performing work related activities, assessments of work ability, and knowledge gained from other professionals at the job centres, which contributed to a more in depth understanding of each citizen’s life situation. Resources and barriers were uncovered in relation to both work activities and other everyday activities, after which the citizens were aware of what they had to do next in order to return to work. Thus, the OTs only saw the citizen once before the citizen either returned to work or returned to work for a trial period. Follow ups at the workplace were only carried out, if either the citizen or the employer found it necessary and contacted the job centre.

‘Otherwise, I mostly spend my time on counselling aimed at improving the citizen’s coping abilities, which is what I am actually employed to do. Here, I identify the possibilities for the

citizens' return to the labour market, and which resources are present. Eighty percent of the conversations I have [with citizens], I only have once. One conversation and the citizens have actually returned to the labour market - well not always, but they are aware of the next step to take to return to the labour market'.

The OTs' final reports concerning the citizens' ability to participate in work activities and activities at home drew conclusions concerning the citizens' potential for returning to the labour market. The OTs experienced that their knowledge and contributions qualified the social workers' further rehabilitation of the citizens'. For example, the OT's assessment of a citizen's work ability helped the social worker to plan the rehabilitation for the citizen.

'There had to be a full description of the citizen's situation, then an evaluation and an action plan. And this is my work area. And this is also what my colleagues request from me. So the assessments of their [the citizens'] function and their work ability is a very very important part of my job'.

Ergonomics and adaptation of the working environment

When citizens were on long-term sick leave or still on short-term sick leave but at risk of being long-term sick, the aim was often job retention or return to work. It was important to maintain the connection to the labour market; thus, early intervention was needed. The OTs dealt with the practical aspects like work environment, injury prevention, assistive devices, ergonomics, work postures and techniques, and organising work activities in cooperation with the citizens and their employers.

'We need to start early [when intervening at the workplace in tasks related to ergonomics]. We have to intervene and make a difference, [...] we must be placed in the department [at the job centre] of sickness benefits where we meet the citizens the first time they are on sick leave, in order to help them before they drop out of the labour market'.

All interviewed OTs described their knowledge of ergonomics and adaptation of the working environment as unique competencies at the job centres. *‘When you get an assistive device you also have to learn how to use it at the workplace and to use it correctly. It is quite clear that this is one of the areas where my non-OT colleagues fall short’.*

The OTs explained that the combination of health knowledge, knowledge about assistive devices, activity analysis and grading of activities, qualified the OTs to assess the workplace in relation to the citizens’ health situation and ability to return to work.

‘I am employed to work with provision and funding of assistive devices in order to secure job retention. This also includes an ergonomic assessment while they [the citizens] perform their work activities (...). I observe how they utilize themselves most appropriately’. Furthermore, the OTs made a unique workplace assessment, which they told consisted of different content compared to the assessments performed by a workplace consultant or a social worker. The OTs were assessing the details, and they focused on comparing the demands from the work environment to the citizens’ abilities to work in that environment. In approximately half of the interviews with the OTs, the statement about the importance of the environment was repeated. The OTs thus explored the demands from the environment in their workplace assessment in depth and they stressed that this approach was very different from the workplace assessments carried out by the non-OT colleagues and supplemented the teamwork well.

‘It differs which fields we go into in depth. A good example concerns the occupational analysts [a professional group at the job centre]. They perform workplace assessments. But it is with a wholly different content compared to what we do. We go in depth with some details and are aware of [other] things according to our concepts. As an example, we think more about the environment and which influence it has on people’s work activities’.

In sum, most of the OTs found the workplace visits to be of great importance as they could assess the interaction between the citizen and the environment directly and find good solutions.

‘Ninety-percent of the visits I have are at companies where I drive out and meet with a citizen who is on sick leave’.

‘Sometimes, we may be a part of empowering the citizen or assess if anything in the environment has to be modified. This is core OT!’.

Competencies perceived requested by interdisciplinary colleagues

OTs as health professionals

Mostly, the OTs were the only staff on the vocational rehabilitation teams with a health professional education, and often only a single OT was employed at the job centre. The rehabilitation team needed knowledge about the citizens’ different diseases and how these could affect the citizens’ occupational performance. The OTs experienced that they played a unique role in the assessment of the citizens due to their health knowledge, client-centeredness, and holistic approach, and they perceived that their knowledge was highly requested by their interdisciplinary colleagues.

‘Besides being an OT, it is my health professional approach that is my strength’.

Further, the OTs were specifically employed to facilitate collaboration between the job centres and the healthcare centres and among the healthcare professionals who worked at the healthcare centres. Likewise, they were employed to increase the understanding between the two centres.

‘When I was employed, one of the assignments was to strengthen the cooperation and understanding between the employees at the healthcare centre and the employees at the job centre, because the two centres sometimes had problems working together. Now, I co-operate with her [an employee at the healthcare centre]’.

Work ability assessments

Another task perceived requested by the non-OT colleagues, was the OTs' description and clarification of the citizen's ability to participate in work activities. This facilitated the social worker's establishment of the amount of weekly work hours that the citizen could be expected to manage when they first returned to work and, in consequence, the calculation of the added sickness benefits to be granted as long as the citizen was unable to work full-time.

'There had to be a full description of the citizen's situation, then an evaluation and an action plan. And this is my work area. And this is also what my colleagues request from me'.

The OTs explained that their colleagues on the rehabilitation team needed their assessment of the citizens to make decisions regarding what to do next in the vocational rehabilitation process.

'My colleagues use this (the OT's work ability assessment) when a case is being brought up at a rehabilitation meeting. They find that the OT's assessment is needed to obtain a complete picture of the citizen'.

When a work ability assessment conducted by the OTs was not available, the case could often not be settled.

'In my experience, our work ability assessments are highly requested and necessary. We [the OTs] hear that a case has been brought up at a rehabilitation meeting where the doctors say, "well, there is no assessment from the OTs". And then the case is referred [back to us] because they want an assessment from our profession. So, the doctors need it [the work ability assessment from an OT]'.

Discussion

Four main themes occurred when the OTs described their competencies at the job centres; 1) having a client-centered approach; 2) having a holistic approach; 3) performing work ability assessments and 4) assessing and teaching ergonomics and adaptation of the working

environment. When the OTs described what their colleagues requested from them, they unanimously pointed out; 1) their knowledge as healthcare professionals and 2) their high-quality work ability assessments.

Competencies used by the OTs at the job centres

Working in a client-centered way

The OTs in the present study emphasized their client-centered approach, which is consistent with the statement of the World Federation of Occupational Therapists (WFOT) (11). That OTs must respect the citizens, create a partnership with them and value their autonomy in order to enable the citizens' participation in the occupations that they want, need and are expected to perform (12). A Swedish study from 2014 aimed at describing how individuals experienced interventions within vocational rehabilitation and the impact the interventions had on their ability to perform their work and other everyday activities (21). One of the study's findings was: '*From being passive to making one's own efforts in the rehabilitation process*', supporting the importance of a client-centered approach (21). Another Swedish study from 2004 concluded that vocational rehabilitation needs to be truly client-centered by integrating the citizens' perceptions into developing a multidimensional rehabilitation approach (22). Further, a study from 2017 showed that using a motivational interview approach, known as a client-centered method, led to a more sustainable return to work after rehabilitation (23).

Taking a holistic approach when performing work ability assessments

According to the OTs in the present study, assessing work ability is complex and requires a holistic approach. More than just knowledge of health and physical capacity related to work activities contributes to the OTs' holistic approach in vocational rehabilitation. The holistic approach is supported by experiences with the Danish *Reform of early retirement and subsidised employment* (24). Likewise, a study from 2018 explained that important features of

return-to-work self-efficacy concerns being able to engage in meaningful occupations, be independent and participate in leisure activities besides one's work activities (25). The authors therefore concluded that measures to improve return-to-work self-efficacy calls for a holistic approach (25). The OTs in the present study described the importance of enabling citizens to participate in their everyday life activities in order to be able to participate in their work activities. This idea is supported by the *Reform of early retirement and subsidised employment*: "*When trying to enable participation in work activities it is important to adjust the activity demands to the resources of the citizens' whole life situation*" (26). A Swedish study from 2013 supports the importance of engaging in non-work related activities during work rehabilitation (27). Thus, the OTs have to collect information regarding all aspects of the citizen's life in order to create an adequate work ability assessment, to be used in the vocational rehabilitation process. The OTs of the present study seemingly managed to 'do the right thing', that is to work in a holistic (and client-centred way), however this may not be possible in all work rehabilitation settings in or outside Scandinavia. This calls for discussions and consensus among OTs concerning core values and tasks to ensure the best quality possible of their interventions given current political and economic possibilities and restraints.

Ergonomics and adaptation of the working environment

The OTs in the present study emphasized that their detailed knowledge about ergonomics, adaptation of the working environment, assistive devices, activity analysis, grading of activities, and health was important for their work at the job centres. The OTs enabled citizens to remain at work or return to work after being on long-term sick leave by focusing on workplace reorganisation, assistive devices, work postures, techniques, ergonomics, adaptation of the working environment and organising work activities in cooperation with the citizen and the employer. These qualifications are highlighted in the Danish Agency for Labour Market and Recruitment's description of assignments enabling citizens with

disabilities to return to work (28). The OTs' competencies to analyse and suggest improvements of work postures, techniques, ergonomics, adaptation of the working environment and workplace reorganisation are likewise emphasized in the Danish *Sickness Benefit Reform* from 2014, created to enable citizens to return to work (4). Thus, in Denmark the competencies that the OTs perceived as most important to their function within vocational rehabilitation seem to be acknowledged within health and social policy.

Competencies perceived requested by interdisciplinary colleagues

OTs as health professionals and their ability to perform work ability assessments

The present study showed that OTs were often the only members on the rehabilitation teams with a health professional background. Their knowledge of the citizens' diseases, disabilities and potential was therefore highly requested. The OTs were also requested by the job centres to collaborate with other stakeholders; such as health centres. Our findings show that before the job centres had OTs employed, the cooperation between job centres and health centres was characterised by some difficulties. These difficulties are also found in a study exploring the professionals' perspectives on work ability assessments in a changing sickness insurance system in Sweden (29). Further, as described by Stahl et al.; *'health professionals share a holistic view on work ability, relating it to a variety of factors. Social insurance, on the other hand, represent a reductionist stance, where work ability is reduced to medical status'* (30). These findings are therefore in line with the present study's findings, describing both the same difficulties and pointing out the same suggestion, namely that the teams need to cooperate more closely (30).

The OTs experienced that their assessments of the citizens' work ability were highly requested by the rehabilitation teams in order to help the teams make decisions regarding the next step in the citizen's rehabilitation process. Despite similarities in Swedish studies, it is difficult to say if the requests for OTs' interventions and competencies are similar in other

countries, as this is the first study within vocational rehabilitation, to our knowledge, which has examined how OTs perceive that other professions request their competencies (29)(30).

Methodological discussion

The sequential mixed-methods design ensured a deeper understanding of OTs' work within vocational rehabilitation, as the information about the OT's work tasks collected using the five-day work diaries informed the interview guide and prepared the interviewer for the individual interviews, where the findings were further explained. This increased the level of detail. Pilot testing the five-day work diary and the interview guide strengthened the reliability and validity of the study.

Only 15 of 29 job centres in Denmark who employed OTs were represented, as it turned out to be difficult to recruit OTs for the study. However, the participating centres were placed all over Denmark (geographic diversity) in both larger and smaller municipalities and with also both a social and an economic diversity. This supports that the results may be regarded as representative of OTs working in Danish job centres.

A questionable methodological consideration is our choice of participants in the present study, as we did not ask employees of non-OT professions about how they experienced collaborating with OTs within vocational rehabilitation. Therefore, it is highly possible that our findings concerning other professions' appreciation of the OTs' work may be biased by the OT's self-perception of their work. Thus, interviewing other professionals at the job centres or the managers who hire the OTs could be of value in future research on OTs' unique contribution to this specialized and important area.

Conclusion

The Danish OTs explained that they had a client-centered and holistic approach focusing on the citizens' work as well as their other everyday life activities when they conducted work ability assessments. The OTs used their health professional education and knowledge of

ergonomics, adaptation of the working environment, work postures and techniques, assistive devices, organisation of work activities, etc., which strengthened the quality of their work ability assessments. The OTs perceived that their work and OT competencies were highly requested by their interdisciplinary colleagues. The OTs experienced that they were a highly relevant profession within the rehabilitation teams at the job centres.

Significance for occupational therapy

The results of the present study show that the OTs experienced having a special role in vocational rehabilitation and highlight some of the tasks performed by the OTs that enabled citizens' job retention or return to work. The OTs contributed their unique qualifications to the interdisciplinary rehabilitation teams. To understand what the OTs can actually contribute with at job centres within the rehabilitation teams, is the first step to evidence-base the OT parts of the rehabilitation process.

Future research

As our findings concern the OTs' self-perception of their work, it could be of value in future research to explore the experiences of other professionals from the rehabilitation teams at the job centres concerning the OTs' unique contributions to vocational rehabilitation. Also, it could be of interest to explore why the managers at the job centres hire the OTs as well as exploring the citizens perspective of the service they received at the job centres from the OTs and if it differed from the service they received from other health professionals at the job centres. Exploring the effect of OT interventions on vocational rehabilitation in a controlled trial could show the potential of OT interventions and thus add to the evidence base so important for practitioners of the field and decision makers.

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Disclosure of interest

The authors declare no conflict of interest.

Data availability statement

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

References

1. Petersen KS, Hansen B, Momsen A-MH. Arbejdsfastholdelse og inklusion [Work retention and inclusion]. Munksgaard 2016.
2. Klausen J, Schultz T, von Hielmcrone N. Socialret: Forsørgelse og beskæftigelse [Social law: support and employment]. Denmark Jurist- og Økonomforbundet; 2017.
3. The Danish Government. Reform af beskæftigelsesindsatsen: Vejen til varig beskæftigelse – den enkelte i centrum [Reform of employment efforts: The roads to lasting employment - focus on the individual]. In: The Ministry of Employment, editor. 2014.
4. Cabiweb.dk. Sygedagpengereform [The Reform of the Sickness Benefits Scheme] 2017 Available from: <http://www.cabiweb.dk/sygedagpengereform/>.
5. Danish Agency for Labour Market and Recruitment. Bekendtgørelse af lov om en aktiv beskæftigelsesindsats [The reform of sickness benefits scheme]. In: Beskæftigelsesministeriet, editor. Lovtidende A 2016.
6. Danish Agency for Labour Market and Recruitment. Rehabiliteringsteam [Rehabilitation team] 2019. Available from: <https://star.dk/indsatser-og-ordninger/indsatser-ved-sygdom-nedslidning-mv/rehabiliteringsteam/>.

7. Desiron HA, de Rijk A, Van Hoof E, Donceel P. Occupational therapy and return to work: a systematic literature review. *BMC public health*. 2011;11:615.
8. van Biljon HM, Casteleijn D, du Toit SHJ, Soulsby L. Opinions of occupational therapists on the positioning of vocational rehabilitation services in Gauteng Public Healthcare. *South African Journal of Occupational Therapy*. 2016;46:45-52.
9. McFeely G. Health at Work: An Analysis of Black's and Frost's Independent Review of Sickness Absence - What can Occupational Therapists Offer? *British Journal of Occupational Therapy*. 2012;75:343-5.
10. Danish Occupational Therapy Association. Work Rehabilitation, Danish Association of Occupational Therapists; Available from: <https://www.etf.dk/ergoterapi-og-politik/arbejdsrehabilitering>.
11. World Federation of Occupational Therapists. Position statement: Occupational Therapy in Work-related Practice. 2016.
12. World Federation of Occupational Therapists. Position Statement on Client-centredness in Occupational Therapy. World Federation of Occupational Therapists; 2010.
13. Fisher AG, Marterella A. Powerful practice: A Model for Authentic Occupational Therapy. Fort Collins, CO: Center for Innovative OT Solutions; 2019.
14. Creswell JW, Clark VLP. Designing and conducting mixed methods research 2ND ed. Thousand Oaks, CA: SAGE 2011.
15. Maxwell JA. Qualitative Research Design An Interactive Approach, Chapter 5. 3 ed: SAGE 2013.
16. Wma.net[Internet]. WMA Declaration of Helsinki - Ethical Principles for Medical Research Involving Human Subjects: World Medical Association; [cited 2016 Jun 30]. Available from: <http://www.wma.net/en/30publications/10policies/b3/>.

17. Smith JA, Flowers P, Larkin M. Interpretative phenomenological analysis: theory, method and research. SAGE 2009.
18. Malterud K. Systematic text condensation: a strategy for qualitative analysis. *Scandinavian journal of public health*. 2012;40:795-805.
19. Kondracki NL, Wellman NS, Amundson DR. Content analysis: review of methods and their applications in nutrition education. *Journal of nutrition education and behavior*. 2002;34:224-30.
20. Vygotskij LS, Lloyd P, Fernyhough C. Lev Vygotsky. 3. The zone of proximal development. Routledge 1999.
21. Jansson I, Perseus KI, Gunnarsson AB, Bjorklund A. Work and everyday activities: experiences from two interventions addressing people with common mental disorders. *Scandinavian journal of occupational therapy*. 2014;21:295-304.
22. Soderberg S, Jumisko E, Gard G. Clients' experiences of a work rehabilitation process. *Disability and rehabilitation*. 2004;26:419-24.
23. Gross DP, Park J, Rayani F, Norris CM, Esmail S. Motivational Interviewing Improves Sustainable Return to Work in Injured Workers After Rehabilitation: A Cluster Randomized Controlled Trial. *Archives of physical medicine and rehabilitation*. 2017;98:2355-63.
24. Nielsen CV. Arbejdsrettet rehabilitering [Work-oriented rehabilitation]. *Ugeskrift for læger*. 2014;10.
25. Lork K, Holmgren K. The experience of return to work self-efficacy among people on sick leave. *Work*. 2018;59:479-90.
26. Danish Agency for Labour Market and Recruitment. Reform af førtidspension og fleksjob [Reform of early retirement and flex jobs] 2019 Available from: <https://star.dk/reformer/reformen-af-foertidspension-og-fleksjob/>.

27. Sturesson M, Edlund C, Fjellman-Wiklund A, Falkdal AH, Bernspang B. Work ability as obscure, complex and unique: views of Swedish occupational therapists and physicians. *Work*. 2013;45:117-28.
28. Recruitment DAfLMA. Nøglepersoner på handicapområdet i jobcentrene [Key persons in the disability area in job centers] 2017 Available from: <https://star.dk/indsatser-og-ordninger/handicapomraadet/noeglepersoner-i-jobcentrene/>
29. Stahl C, Svensson T, Petersson G, Ekberg K. Swedish rehabilitation professionals' perspectives on work ability assessments in a changing sickness insurance system. *Disability and rehabilitation*. 2011;33:1373-82.
30. Stahl C, Svensson T, Petersson G, Ekberg K. The work ability divide: holistic and reductionistic approaches in Swedish interdisciplinary rehabilitation teams. *Journal of occupational rehabilitation*. 2009;19:264-73.

Legends

Table

Table 1: Characteristics of the occupational therapists.

Appendix

Appendix 1: Template for registration of tasks each hour over a five-day work week.

Appendix 2: Interview guide.

Appendix 1: Template for registration of tasks each hour over a five-day work week

Time	Monday	Tuesday	Wednesday	Thursday	Friday
7.00-8.00 am					
8.00-9.00 am					
9.00-10.00 am					
10.00-11.00 am					
11.00-12.00 am					
12.00-1.00 pm					
1.00-2.00 pm					
2.00-3.00 pm					
3.00-4.00 pm					
4.00-5.00 pm					
5.00-6.00 pm					

Can I contact you for participation in an interview? Yes ____ No ____

Contact information (E mail and/or phone): _____

Thank you for participating!

Appendix 2. Main- and sub-categories of all occupational therapy tasks within vocational rehabilitation in Danish job centers

	OT 1	OT 2	OT 3	OT 4	OT 5	OT 6	OT 7	OT 8	OT 9	OT 10	OT 11	OT 12	OT 13	OT 14			
Tasks in Categories	Hours (%)														Total hours	Mean hours	%
Citizens interventions																	22.1
Meetings with citizens	13 (37.1)	4 (10.7)	4 (11.3)	5.5 (12.8)	1.5 (4.4)	0 (0.0)	2.5 (6.5)	14 (53.9)	1 (4.4)	3 (9.8)	0.5 (2.5)	2.5 (8.9)	0 (0.0)	4 (11.4)	55.5	3.9	12.4
Home visits/ ADL-assessments	0 (0.0)	2 (5.3)	1 (2.8)	2.5 (5.9)	6 (17.4)	3.5 (11.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0.5 (2.5)	0 (0.0)	5.5 (14.7)	0 (0.0)	21.0	1.5	4.3
Group intervention/ citizens contact	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1.5 (5.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (5.0)	3 (10.7)	0 (0.0)	4 (11.4)	9.5	0.6	2.3
Contact by telephone	0 (0.0)	0 (0.0)	7 (19.7)	5.25 (12.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (7.1)	1.5 (4.0)	0 (0.0)	15.8	1.1	3.08
Workplace activities																	10.2
Workplace visits	1 (2.9)	0 (0.0)	1 (2.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (9.8)	6.5 (32.5)	0 (0.0)	1.5 (4.0)	0 (0.0)	13.0	0.9	3.7
Contact/follow up	0 (0.0)	0 (0.0)	5 (14.1)	4 (9.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (5.7)	11.0	0.8	2.1
Assessments/ ergonomics/ aids	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (2.9)	1 (3.4)	6.5 (16.9)	0 (0.0)	3 (13.3)	0 (0.0)	4 (20.0)	0 (0.0)	2 (5.3)	0 (0.0)	17.5	1.3	4.4
OT work																	31.9
Reflection/development/studying	0 (0.0)	0.8 (2.0)	1 (2.8)	0 (0.0)	0 (0.0)	2 (6.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	5 (17.9)	4.5 (12.0)	0 (0.0)	13.3	1.0	3.0
Evaluations/status/follow up	12 (34.3)	5.5 (14.7)	3.5 (9.9)	5 (11.7)	12 (34.8)	8 (26.9)	0 (0.0)	4 (15.4)	0 (0.0)	0 (0.0)	1 (5.0)	0 (0.0)	14.5 (38.7)	5 (14.3)	70.5	5.0	14.7
Processing and granting	0 (0.0)	6.5 (17.3)	4 (11.3)	2 (4.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	12 (53.3)	7 (23.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	31.5	2.3	7.8
Preparation	0 (0.0)	0 (0.0)	0.5 (1.4)	2.5 (5.8)	0 (0.0)	4 (13.5)	0 (0.0)	4 (15.4)	0 (0.0)	0 (0.0)	0 (0.0)	8.5 (30.4)	2 (5.3)	6.5 (18.6)	28.0	2.0	6.5
Meetings																	12.0
Intern	4 (11.4)	1.5 (4.0)	5 (14.1)	3 (7.0)	4.5 (13.0)	2.5 (8.4)	3 (7.8)	3 (11.5)	2.5 (11.1)	2 (6.6)	1 (5.0)	0.5 (1.8)	0 (0.0)	5 (14.3)	37.5	2.7	8.3
Extern	0 (0.0)	6 (16.0)	0.5 (1.4)	1.5 (3.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	7 (23.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (8.6)	18.0	1.3	3.8
Administrative work																	14.4
Office (computer, e-mail, ect.)	1 (2.9)	6.3 (16.7)	2 (5.6)	7.5 (17.5)	4.5 (13.0)	0 (0.0)	22 (57.1)	0 (0.0)	3 (13.3)	7 (23.0)	0 (0.0)	5 (17.9)	1 (2.7)	1.5 (4.3)	60.8	4.3	12.4
Telephone (unspecified)	3 (8.6)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3.0	0.2	0.6
Contact to	1	0	0.5	0.5	0	1.5	0	1	1	0	0	0	0	0	5.5	0.4	1.3

collaborators	(2.9)	(0.0)	(1.4)	(1.2)	(0.0)	(5.0)	(0.0)	(3.9)	(4.4)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)			
Others																9.4	
Transportation	0 (0.0)	5 (13.3)	0.5 (1.4)	1 (2.3)	3.5 (10.1)	2.5 (8.4)	4.5 (11.7)	0 (0.0)	0 (0.0)	0 (0.0)	3 (15.0)	0 (0.0)	2.5 (6.7)	2 (5.7)	24.5	1.8	5.3
Breaks	0 (0.0)	0 (0.0)	0 (0.0)	2.5 (5.9)	1.5 (4.4)	3.3 (10.9)	0 (0.0)	0 (0.0)	0 (0.0)	1.5 (4.9)	2.5 (12.5)	1.5 (5.4)	2.5 (6.7)	2 (5.7)	17.3	1.2	4.0
Weekly hours in total	35.0	37.5	35.5	42.8	34.5	29.8	38.5	26.0	22.5	30.5	20.0	28.0	37.5	35.0	453.0	32.36	100

OT: Occupational therapy