

Workplace accommodation in return to work after mild traumatic brain injury

Øystein Spjelkavik, cand.sociol^{a*}, Heidi Enehaug, PhD^{a*}, Pål Klethagen, cand.merc^a, Emilie Isager Howe, PhD^{d,f}, Silje C.R. Fure, MD^{d,e}, Hans Christoffer Aargaard Terjesen, cand.polit^a, Marianne Løvstad, PhD^{b,c}, Nada Andelic, MD, PhD^{d,e}

^a Work Research Institute, Oslo Metropolitan University, Oslo, Norway.

^b Department of Research, Sunnaas Rehabilitation Hospital Trust, Nesoddtangen, Norway.

^c Department of Psychology, University of Oslo, Oslo, Norway.

^d Department of Physical Medicine and Rehabilitation, Oslo University Hospital, Oslo, Norway.

^e Research Centre for Habilitation and Rehabilitation Models and Services (CHARM), Institute of Health and Society, University of Oslo, Oslo, Norway.

^f Institute of Clinical Medicine, Faculty of Medicine, University of Oslo, Oslo, Norway.

*Corresponding authors:

I) Øystein Spjelkavik, Work Research Institute, Oslo Metropolitan University, Oslo, Norway.
E-mail: oyosp@oslomet.no : <https://orcid.org/0000-0003-1151-1263>

II) Heidi Enehaug, Work Research Institute, Oslo Metropolitan University, Oslo, Norway. E-mail: eneh@oslomet.no : <https://orcid.org/0000-0003-2773-4680>

Abstract

Background: While a vast amount of research focuses on unmodifiable and individual factors that may impact return to work (RTW) for patients with traumatic brain injury (TBI), less knowledge exists of the relationship between specific workplace factors and work retention.

Objective: Identify types of accommodation in the workplace that influence the RTW process for employees with TBI and the challenges associated with them.

Methods: A multiple case study consisting of 38 cases and 109 interviews of employees with TBI and their managers conducted between 2017 and 2020 at two time points.

Results: Accommodation of both the organizational and psychosocial work environment influences RTW for employees with TBI. Social support and supportive management may have positive and negative effects. RTW is often not a linear process. Over time, maintaining and developing customized accommodation in the work organization is challenging.

Conclusions: Uncertainty about accommodation in RTW for employees with TBI is closely linked to lack of knowledge in the workplace of how to handle complex and nonlinear RTW processes. Work-oriented rehabilitation should to a greater extent provide managers with relevant information and support to develop the person-environment fit over time.

Key words: job retention, management, reintegration, work environment, workplace process

1. Introduction

An estimated 50 million people suffer from traumatic brain injury (TBI) each year [1], and a large proportion of them experience short- or long-term sickness absence from work. Approximately nine out of 10 TBI cases are classified as mild TBI [2]. Of these, 15–20% experience various somatic, emotional, and cognitive symptoms lasting longer than three months [3]. Consequently, a substantial proportion of these individuals experience difficulties in returning to their pre-injury work levels, and workplace accommodation for persons with lasting symptoms following mild TBIs is difficult to implement [4, 5]. There seems to be a high degree of heterogeneity in work post-TBI challenges associated with RTW and long-term job retention, and even those with mild TBI sometimes fail to make a complete RTW at 12 months [6]. A systematic review and meta-analysis reported that 56% of individuals with mild TBI show RTW at one month, 81% at six months, and 88% at 12 months post injury [7].

Proactive organizational practices and provision of accommodations in the workplace have shown to be effective for RTW and for preventing long-term sick leave [8, 9], but nevertheless have low representation in the literature on RTW after TBI [10, 11]. A scoping review of rehabilitation interventions after TBI found an overrepresentation of quantitative studies as well as an underrepresentation of studies on mild/moderate TBI and RTW [10]. Research on RTW for patients with TBI often focus on individual factors such as injury severity, post-concussion symptoms, demographic factors, pre-injury occupational status, previous psychiatric history and how physical, cognitive and emotional symptoms affect patients and their families, and their capacity to remain competitively employed [12–16].

TBI has an undesirable effect on many individuals' work participation and employment identity [17, 18]. While pre-injury employment status and type of occupation influence RTW outcomes after TBI [19], employees with mild TBI often return to lower-level jobs, work reduced hours or are assigned new, often simpler, work tasks [20, 21]. In recent years, more studies have paid attention to the role of the workplace in RTW processes [22, 23]. Factors such as independence and co-determination of working tasks [8] as well as employer engagement in implementing supportive strategies seem to positively influence the rate of RTW after TBI [5, 9, 24–27]. Still, more attention should be given to identifying and implementing workplace accommodations and proper job modifications for employees with TBI [28].

The aim of this article is to contribute to the development of knowledge about workplace processes in RTW after TBI. We understand accommodation in the workplace as a social process that involves the relationship between the individual employee's capacity and the workplace context in which RTW takes place [29–32]. The relationship between the individual's work ability and state of health must be assessed contextually in light of the individual's ability and environmental requirements [33]. The combination of an individual support perspective [34, 35] and a workplace perspective [36, 37] connects to the understanding of what kind of competence challenges the work organization faces in efforts to reintegrate employees with major health issues as valuable labor [38, 39].

2. Data and methods

2.1 Study design

This qualitative case study was carried out in 2017–2020. The data include a sample from a randomized controlled trial (RCT) that compared the effectiveness of combining manualized cognitive rehabilitation (compensatory cognitive training) and supported employment (SE)

with treatment as usual (TAU) on RTW outcomes [40] The interventions were provided in the specialist healthcare service and in real-life competitive work settings for employees with mild to moderate TBI in eastern Norway [41]. Since the main statistical analysis did not reveal between-group differences at the 12-month follow-up [42], the present study investigates accommodation in RTW processes for patients from both study groups.

The Norwegian Regional Committee for Medical and Health Research Ethics (REC no. 2016/2038) approved this study. Informed consent was obtained, and further assurances of confidentiality were given to the study participants prior to the interviews.

2.2 Procedures

After enrolment in the RCT, the first 45 employees with TBI who had returned to work were asked to participate in the case study. To be included as a case, the person with TBI consented to participate and accepted that their managers were interviewed. Thirty-eight cases were included at T1. The employee was the main informant in each case and was interviewed first.

Interviews took place at two time points. Interviews at T1 took place one to three months after RTW, while interviews at T2 took place 12–16 months after T1. Information from different perspectives (employee versus manager) was collected at both time points. The interviews lasted for 1–1.5 hours and were audio-recorded and transcribed verbatim.

Employee and manager interview guides were based on adapted questions (work environment, workplace conflict, social support, management) from the Copenhagen Psychosocial Questionnaire [43]. Questions on present work situation, changes in work situation due to TBI, actual work accommodation, challenges in work accommodation, and knowledge of TBI were added.

2.3 Data material

Sixty-four interviews with employees with TBI and 45 interviews with their managers were conducted.

Table 1 shows the distribution of informants with TBI, by background variables. Note that the group of informants with TBI consisted of individuals in both subordinate and leading positions (managers).

*Table 1 Informants with TBI, by background variables, n. *) The group of informants with TBI consisted of individuals in both subordinate and leading positions (managers).*

In 13 of the included 38 cases, the employees with TBI held a leadership position at T1. Gender distribution among the employee informants was even, but there was an overrepresentation of persons from the private sector doing white-collar work. The informants represented several areas/industries in the public and private sectors such as financial services, retail, education, non-governmental organizations, public administration, building and construction, restaurant, health institutions, social services, and insurance. There was an uneven distribution of informants in the manager and employee category at T1. At T2 some of the informants had changed their position. A more detailed overview of the informants is presented in Appendix 2.

Table 2 shows interview dropout rates.

Table 2 Number of informant interview dropouts by interview time (T1, T2) and informant category, n.

The highest dropout rate was among managers, as 31 of the potential manager interviews did not take place for various reasons; the informants with TBI did not want their managers to be interviewed or the managers themselves did not want to participate or were unavailable. Twelve of the employee interviews did not take place due to informant unavailability.

2.4 Data analysis

The analysis proceeded in seven steps and was based on a comparative case study approach [44]. First, researchers analyzed four of the employee interviews separately through margin notes and open coding [45, 46]. Second, the coding was compared and discussed in the research team. Third, a codebook was constructed, tested, evaluated, and adjusted twice. Fourth, the NVivo 9 software program was used to code all interview transcripts according to the codebook. Fifth, the codes were fitted into a matrix of main analytic categories (including background variables: gender, position, RTW status, sector, industry, white collar/blue collar), and sorted by 1) case identification number, 2) time point, 3) position (employee/manager), and 4) intervention/control group. This provided opportunities for performing both (sixth) a comparative case analysis focused on case internal developments and (seventh) a thematic cross-case analysis.

The main analytic codes/categories were a mix of theoretically based initial assumptions and insights from work environment and work inclusion research in combination with the use of codes derived directly from the empirical data. We analyzed the data material on the assumption that psychosocial and organizational factors at work that are generally considered to be health promoting [47] will be equally important in RTW processes. From a support perspective, we understand the RTW process not simply as a matter of how individual characteristics correspond with institutional guidelines, workplace policies and practices, but rather as a function of the workplace's competence in customizing accommodation [29, 30, 39].

All interviews were deidentified during transcription and all cases were assigned a number.

3. Findings

In accordance with the Demand-Control-Support model [36], a person's support needs are determined by the relationship between individual capacity and the context in which the person is functioning. This implies the necessity to understand accommodation as support for customization to develop and improve job match quality in a work organizational context [34, 35]. To analyze factors that may contribute to accommodation in the RTW process related to the psychosocial and organizational work environment, an objective has been to obtain rich descriptions of the individual and contextual work situation.

We divide workplace accommodation into two main categories: 1) accommodation in the organizational work environment and 2) accommodation in the psychosocial work environment. The categories largely correspond to work environment factors that contribute to a health-promoting work life [47]. Figure 1 shows types of accommodation mentioned by patients and managers across timelines, categorized within the two main dimensions: the psychosocial work environment and the organizational work environment.

Figure 1. Types of accommodation in the organizational and the psychosocial work environment.

Details concerning types of accommodation and distribution among cases are presented in Appendixes 1 and 2.

3.1 Accommodation in the organizational work environment

Accommodation in the organizational work environment, either at T1 or T2 or both, was mentioned in all 38 cases, including those where the employee with TBI had returned to a full-

time position at T1. At T2, accommodation in the organizational work environment was also mentioned by 12 of the 19 employees working in full-time positions. These accommodations largely concerned the employee's work tasks, position and working hours, the organization of work and work demands, and physical arrangements.

Most employees (31 of 38) resumed work gradually. Frequently mentioned accommodations entailed customizing and structuring work tasks (fewer or less complex, stressful, or demanding) and reduced concentration- and memory-demanding tasks. The most common accommodations regarding position and working hours entailed reducing working hours, flexible presence at work and avoiding work during especially busy working hours.

Common accommodations in the organization of work and work demands consisted of reallocating work tasks to others (co-worker, manager, or a substitute) and customizing work (adapting shifts, increasing the number of breaks, reducing the number of meetings, reducing or decreasing the number of digital meetings, limiting the work area, reducing customer contact, working from home, adjusting pace, and making use of compensatory labor resources). Accommodations that more directly influenced work demands consisted of modifying expected performance, prolonging deadlines, and reducing demands on earnings and delivery.

In 28 cases, employees with TBI and their managers mentioned physical arrangements in the work environment. These applied to light, noise, hearing and sight conditions, raising and lowering tables, and adjusting screens. Some cases also mentioned physical training and exercises, or special equipment such as massage chairs, rest mattresses and exercise tools. In seven cases, physical arrangements occurred only at T2.

3.1.1 The complexity of accommodation

The following examples illustrate the complexity of RTW processes and indicate that there might be changing, but persistent, accommodation needs.

At T1, the employee in case 16 was working in an active outward position, was 100% back in the same position as before the accident, but now with “greater flexibility, less pressure, deadlines and overtime. “The employee could also work from home. At T2, the employee was still working 100% in the same position, and said, “There is no need for co-workers to pay special attention” and “no need for accommodation other than the possibility of being able to shield myself from disturbances when needed.”

While this and other cases show a rather straightforward development of RTW after TBI, but still with accommodation needs at 100% RTW, there are also more complex cases. At T1, the employee in case 19 was working 80% with customized work tasks. The employee had moved from an open space co-working office to an office shared with fewer co-workers to protect against sensory impressions, had limited project involvement and fewer delivery deadlines. In addition, the employee spent less time in meetings and frequently worked from home. To promote physical activity, the manager considered walking and bicycling between home and work as part of the working hours. At T2, the position was reduced to 50%, the employee had an individual cell office and did not lead any projects. At the same time, the complexity of work tasks had increased and, according to the manager, were “performed more in a realistic environment, the tasks are less customized and the involvement in larger teams has increased.”

Both manager and employee found that increased task complexity combined with a reduced position gave the employee increased job control and progress. While indicating that there might be a need for continued accommodation even at 100% RTW, this case also serves as an example of a process development in RTW that involves the employee’s desire for control and

long-term need for accommodation. Several of the examples that follow illustrate that the development in the RTW process can easily take other directions.

3.1.2 Changing position, jobs, and unemployment

While accommodation in the cases above took place for employees who maintained their prior position, the following examples entail similar process development, but with a different outcome: a change in position and job, voluntarily or involuntarily.

Before the injury, the employee in case 1 was working shifts as a team leader in an outward operations activity. At T1, the employee had returned to a 30% position. Accommodation consisted of flexible presence, no night shifts, joining the team as an extra crew member, and a co-worker taking over responsibility as team leader. At T1, the employee expressed that there was “very good support from the manager.” The manager said, “We have many opportunities to change the work tasks, the most important thing is that [the employee] gets well and does not exaggerate the work efforts.” At T2, the employee worked 100% in a new position in the same organization, performing the same work tasks but still without team leader responsibility or working night shifts. The new position provided a good fit between individual capacity and environmental demands, and there was no need for additional accommodation.

While the above case exemplifies a deliberate change of position, in other cases such changes in the work assignments and demands in the RTW were unwanted. Prior to the injury, the employee in case 2 worked as a team leader in the private sector. At T2, the employee worked in a 40% position, and the manager said, “After a year and a half, I made the decision that the employee could no longer be team leader because the team requires a lot and must constantly evolve.” The employee felt deprived of authority and experienced a low degree of job control:

“There were parts of my old job I could do even if I was on sick leave, but they did not want that. The argument was that there needed to be one person to take full responsibility.”

Whereas some employees with TBI managed to retain their job though not their prior position, two cases showed a transition to unemployment from T1 to T2. In one of them (case 25), the employee had held a leading position in a private company performing industrial services pre-injury. At T1, the employee worked in an 80% position and accommodation involved reduced responsibility and changes in work tasks. The employee worked on a customized project, expressed a desire for a 100% position, and was afraid of losing the job. The manager said that co-workers “are insecure because the employee seems frustrated and bitter, they feel sorry for the employee.” At T2, the employee was unemployed and described a development with less support because “the manager had lost all patience, and there was suspicion.” According to the manager, the employee “became difficult to relate to”, and added, “it is difficult to accommodate work for an employee with a lot of responsibility.” The case illustrates the difficulties in accommodating a person–environment fit when the employee is in a management position, and difficulties are exacerbated when co-workers and managers sense a change in personality after TBI.

3.2 Accommodation in the psychosocial work environment

We have identified two main categories of accommodation in the psychosocial work environment: social support from co-workers and supportive management. In only six of the 38 cases was accommodation in the psychosocial work environment not mentioned.

3.2.1 Social support

Experiences of social support in our data entailed concrete but informal actions, for example when co-workers without any formal authority took care of work tasks, when social support

was manifested in random conversations with co-workers or when co-workers expressed interest or compassion. In most cases, the employees with TBI appreciated the care from co-workers: “I was well received when I returned to work”, “There is a lot of understanding” and “Co-workers are concerned that I should not do too much” are typical quotes. Employees with TBI who perceived co-workers as supportive generally gave the impression that this contributed to a less stressful RTW process.

Twenty-eight out of 38 employees mentioned specific instances of social support from co-workers at T1. Mentions of a supportive work environment were much fewer at T2 (n=8). In some of these cases, the employee with TBI spoke about a supportive work environment at T1 that had diminished at T2. The quality or degree of social support or social relations seemingly had changed due to wear and tear, for example when the employee with TBI in case 15 at T2 said, “Both manager and co-workers are tired of sick talk.”

3.2.2 Supportive management

The amount of support from managers varied between cases: some had daily small talk, some weekly structured dialogue, others more infrequent conversations concerning the RTW process. Most employees (29 out of 38) mentioned support from the manager at both time points, though not always as much as they would like. Unsupportive management was mentioned in 16 cases at either T1 or T2 or at both time points. At both T1 and T2, the employee in case 5 described the manager as “uninterested and absent”, while the employee in case 21 described the manager as “not very good at dealing with people.” At T1, the employee in case 38 had the impression that the manager saw her “almost like a burden”, but experienced “slightly more support” at T2.

Based on informants' descriptions, supportive management is characterized by a relationship of trust, empathy, flexibility, boundary setting (e.g., when the manager in case 8 actively held back the employee's work effort to prevent exhaustion from work overload), dialogue, and an understanding of the adequacy of gradual habituation to work.

Case 19 provides a clear example of supportive management. At T1, while the employee with TBI was back in an 80% position, the manager said:

How much [the employee] works is just one parameter, and there are many other parameters. The point is not that [the employee] should be back at work as soon as possible, but to function optimally both at work and privately.

At T2, the employee's work position was reduced to 50% and the manager commented:

I have a different focus on those who are on sick leave or are not in full-time employment. However, it is important that the individual gets challenges to reach for, but not so much that they tip over the edge. This is the same as developing people, just that now we have a different starting point.

In case 4, the employee was working in a 50% position at T1. According to the manager,

[...] boundary setting is necessary to make sure [the employee] understands how to hurry slowly. [The employee] came back to work relatively quickly, but in a reduced position. The strategy was just to talk together and distribute the work tasks to the best of our ability and be careful that we did not try to push more than [the employee] could handle.

The employee with TBI said that the manager had “good insight and understanding, and knows all about papers, deadlines, and those types of things.”

As illustrated in cases 19 and 4, key elements in supportive management seem to be trust and competence. The manager in case 19 had extensive personal knowledge of TBI and emphasized the significance of competent and knowledgeable managers:

I have training in how people process information and how people make decisions. But I have no insight into neurology or that bit [...]. I'm intrigued by it and I probably follow up a little extra.

As in case 4, the employee in case 19 confirmed the impression of a knowledgeable manager:

I do not think you will find a more conscious and competent line manager [...]. I have received incredible support. [The manager] has been able to filter and cope with many of the mistakes that I have made.

Few, if any, of the managers held the opinion that they had sufficient knowledge about TBI-related challenges. Even the managers in cases 4 and 19 expressed uncertainty about how TBI-related challenges should be handled in the workplace. Managers based their knowledge on information mainly from the employee, sometimes from the employee's GP, and in a few cases from knowing someone else with TBI. Most managers were unfamiliar with the diagnosis and expressed concern and uncertainty about how to handle what many described as "an invisible disease" with incomprehensible changes in the employee's functioning. In case 10, the employee said that the manager "does not understand the burden of the injury" and the manager said, "It is difficult to accommodate anything beyond [the employee] taking things at [his/her] own pace." Another manager (case 2) focused on physical accommodation, but later realized that the employee with TBI "needed someone who somehow held her hand and led her forward." These cases illustrate uncertainty associated with the exercise of supportive

management over time without the confidence that decisions are based on knowledge of how TBI-related challenges should be handled.

4 Discussion

The cases in our study showed a large variety of accommodations in both the organizational and psychosocial work environments. The manager is a significant actor in facilitating or obstructing RTW after mild TBI [5], and both employer engagement and co-worker support are important factors in the work organization in RTW processes [9, 24–26, 48]. As such, managers' and co-workers' support and accommodation in the workplace can influence the RTW process in both positive and negative directions. We find significant efforts among managers to provide accommodation that they perceived would contribute to the RTW process, and informants' experiences with accommodation varied both between cases and within the same case, as well as over time.

In the following, we discuss what kind of knowledge can be generated from our findings concerning accommodation in the workplace in RTW processes for employees after (mild) TBI.

4.1 Accommodation in the organizational and psychosocial work environment

Some forms of workplace accommodation were implemented for all employees with TBI in our sample, both at an early stage and later in the RTW process, and regardless their degree of RTW. As noted by Kirsh et al. [35], workplace accommodation is not only about physical changes, but in a few of our cases physical arrangements became more prevalent late in the RTW process. This indicates that over time, physical arrangements (i.e., modifying light, noise, hearing and sight conditions, raising and lowering tables, and adjusting screens) might be easier to handle than other types of accommodation in the organizational and psychosocial work environment. In accordance with other studies [5, 25], we find that the most common forms of

accommodation in RTW after TBI took place in the organizational work environment. Most of these accommodations, can be understood as modifications of work demands that largely correspond to what Kiernan and Schalock (49) identify as “job restructuring” and “work activities modification.”

Cleveland et al. point out that, historically, accommodations in the workplace “were reserved for the average worker in order to move him/her toward maximizing performance and productivity” [34, p. 77]. Research shows that employees with mental health issues face greater challenges associated with work performance than do “average employees” without these kinds of health issues. Employees with (mild) TBI may have emotional and posttraumatic distress symptoms [51, 52] that create challenges in the psychosocial work environment. As noted by Libeson [9], we find that employees with TBI in leading positions may experience significant changes when an alteration in position leads to a sense of loss of status. In our study, there are some examples of RTW processes that entail a change of position and status, both within the same work organization as pre-injury and in a new organization, and that entail both voluntary and involuntary changes.

4.2 The dual function of social support and supportive management

The employees with TBI in our sample worked in different positions and in different industries in the public and private sectors. Despite differences between cases, our study suggests that the relationship between manager and employee with TBI plays a vital role in handling or managing the RTW process, and that social support from co-workers and management is important. These findings correspond to a range of other studies [5, 9, 24–26, 48]. However, we also find cases where unwanted attention caused strain on the employee with TBI. As Kensbock et al. [53] have argued, accommodation at an individual level may unintentionally cause a stigmatizing

individualization; what may have been intended as well-meaning support from co-workers can be perceived by the employee as unwanted focus on health issues.

Johansson et al. found that the patients' "uncertainty about their efficacy cast doubt on their beliefs in improving their skills, balancing daily activities and work" [52, p. 423]. In some of the cases in our sample, we found that psychosocial challenges gave some of the employees with TBI as well as their co-workers a sense of insecurity. In turn, this may have incited qualitative changes in social relations at the workplace.

The dual function of social support from co-workers also applies to management support. Employees with TBI could perceive management as either supportive or unsupportive depending on the interpretation of the situation, the interaction between managers and employees, and on their condition from day to day. Supportive management is not necessarily the same as having shared definitions of situations and contexts. In some cases, managers, and employees with TBI disagreed on the qualitative aspects of management support, and sometimes they emphasized different aspects of support. Many of the cases in our sample indicated uncertainty among managers about how to deal with TBI-related challenges. We find that management without a trusting relationship with the employee with TBI, combined with lack of knowledge about TBI, may appear unsupportive to the employee with TBI. This emphasizes the importance of understanding RTW after TBI as contextual customization of accommodation to meet and balance the needs of the individual and the organization.

4.3 RTW after TBI is often long-term and nonlinear

In our sample, supportive management seemed to be crucial to balance the needs of the workplace and the needs of the employee with TBI, in many cases with priority to employee needs in the first period of RTW. However, as time went by, the needs of the organization

became the priority. We find that both supportive management and support from co-workers were most prevalent at the start of the RTW process. This is an indication that both the work organization and the social relations are worn down by the challenges of TBI over time. When the employee with TBI does not fully recover, the employee, co-workers and manager all face a difficult situation.

We see this as an indication that RTW for employees with TBI constitutes a competence challenge for the work organization that is similar to challenges in work inclusion efforts for “hard-to-place citizens” [54]. Several studies indicate that for vulnerable groups, such as people with mental health issues, job retention after placement or RTW is a challenge [29, 55]. Research on work inclusion emphasizes knowledge transfer of diagnosis-related challenges from the support system to the workplace [29, 38, 56]. This study shows that this type of knowledge transfer is essential for managers in their efforts to tailor support for employees with TBI.

This study also shows that RTW is not always a linear development, that there may be changing needs for customization over a long period of time, and that more accommodation does not necessarily lead to higher percentages of RTW. This observation suggests that accommodation in the RTW process should not necessarily aim to move the employee with TBI toward maximum productivity performance as soon as possible [34], but rather toward customization that balances the needs of both the employee with TBI and the workplace over time. For people with reduced work ability, mastery in work may demand more customization, time resources and general effort from the work organization in order to balance the needs of the individual and the organization [39]. Accommodation in this perspective means continuous development of the person–environment fit and the work organization’s mastery and performance climate [48].

Although most employees with TBI in our sample resumed work gradually, we find that RTW is rarely a matter of a cautious start-up that gradually leads to the same job and position as before TBI [20, 21]. Even when employees with TBI achieved a 100% position at an early stage, our study shows that many needed support and customized accommodation over a longer period. As such, the most important indicators of successful RTW after (mild) TBI did not appear in the very beginning of the RTW process, but rather in the subsequent accommodation process in the work organization, which in our study meant 12–16 months after the first attempt at RTW. Since Watkin et al. found similar results [6], it may be important to develop an enduring support model [31, 32, 38] to accompany RTW processes for employees with TBI, regardless of the start-up percentage of RTW.

As we have seen, a supportive work environment at an early stage of the RTW process may later shift in a more frustrating direction. Over time, co-workers and managers in several cases were suspicious that the co-worker thought he or she was sicker than what was the case. This may be related to a lack of knowledge about (mild) TBI, which is often described as an invisible injury [57]. Many of the informants among the managers in our sample referred to the invisible ailments of TBI which they experienced as different from other sick leave causes that they had encountered. Only a few managers expressed familiarity with the long-term aspect associated with TBI challenges. We suggest that lack of knowledge about TBI-related challenges easily, and perhaps also increasingly, generates unrealistic expectations, uncertainty, frustration, and conflict in the RTW process as time goes by. Moreover, the Norwegian welfare system provides employers with a 100% wage refund during the first 12 months of an employee's sick leave, with subsequent reductions in economic provisions. This creates pressure on employees to return to work and, potentially, a decrease in management motivation to provide accommodation for employees in full-time positions.

A satisfactory work pace means that the demands of the job and the resources necessary to do the job are balanced [36]. Our study indicates that the ambition to implement and develop challenging accommodation often does not last and that over time, in practical RTW processes, intentions of accommodation in the workplace become more focused on the individual's productive ability than on the social conditions for work performance. Similar observations have been made in research on work inclusion for vulnerable unemployed citizens: obtaining an internship or an easy access job is a different matter from job retention [29, 55, 56, 58]; long-term individual customization is a major challenge, regardless of diagnostic group.

Businesses with a high degree of workplace inclusion seem to differ from other businesses by having a higher degree of employer engagement [59]. In our sample, we find many examples of engaged and appreciative managers with positive attitudes and who show empathy toward the employee with TBI [5]. Engagement may be necessary but is apparently not sufficient for a successful RTW for many employees with TBI. To generate relevant accommodation over time, specific knowledge of TBI-related challenges, combined with work organizational competence [39] in accommodation adapted to changing needs, seem to be important preconditions for a successful RTW for employees with TBI.

5 Limitations and further research

A strength of this study is the richness of interview data across workplaces, positions, and time. The interviews at T2 added to the knowledge of challenges in RTW processes, since many potential challenges were limited at T1 or did not surface before T2. In line with Eisner's perspective on consensual validation [46], the study went through several rounds of quality assurance. Study design, data collection and analysis of the data were carried out by several researchers. Findings were continuously discussed and problematized.

We initially set a limit for inclusion of cases to 45 and ended up with 38. In qualitative research, this is likely to be perceived as a high number, as saturation is often achieved much earlier. We wanted to obtain a broad picture of workplace processes. As such, we believe that the “information power” [60] is high because we cover a wide range of jobs and industries. This provides a solid basis for identifying trends in the material that may apply to larger populations. On the other hand, it is conceivable that a lower number of cases would have allowed a more detailed and in-depth analysis.

Despite the high number of cases, one limitation of this study was that dropout within cases resulted in incomplete case process histories and, especially, less data from managers and incomplete development trajectories. Even so, we argue that similarities across cases indicate that identified accommodations and challenges have transfer value beyond the included cases and that the study reveals significant knowledge about accommodation in RTW processes for employees with (mild) TBI.

Employees’ and managers’ perceptions of time to experiment and to try out different approaches, and their perception of urgency to find stable long-term solutions in RTW processes, will vary according to the national institutional framework for RTW. T2 in our project coincides with “time is running out” because of the national regulations governing 12 months of sick leave. Future research should acknowledge how system-inherent rules and regulations limiting the duration of support measures may influence RTW processes.

6 Conclusion

The study shows that TBI creates uncertainty among co-workers and managers, and among employees with TBI themselves, in RTW processes. The uncertainty is closely linked to a lack of knowledge in the workplace about how to handle complex and nonlinear RTW processes.

This uncertainty causes all parties to muddle their way through; they try and fail with different ways of organizing and accommodating the work.

Management is important to ensure appropriate accommodation at the right time, but in doing so, management needs TBI-related knowledge to develop the necessary person–environment fit with changing conditions at different time points in the RTW process.

If work for employees with TBI is considered health-promoting, more attention should be paid to knowledge-based accommodation that considers the complexity of the RTW process. This will require closer integration between treatment institutions and workplaces in RTW processes after TBI to ensure the transfer of knowledge from the treating institution to the workplace.

Acknowledgements

We thank the employees with TBI and their managers for their participation. Dr. Psychol. Daniele Evelin Alves participated in parts of the data collection process. Senior Researcher Angelika Schafft contributed with comments on earlier drafts.

Funding

This work was supported by the Research Council of Norway (256689/H10), which had no role in the study design; in the collection, analysis and interpretation of data; in the writing of the article; or in the decision to submit the article for publication.

Ethical approval

Regional Committee for Medical and Health Ethics in South-East Norway (2016/2038)

Disclosure of interest

The authors declare that they have no competing interest.

References

- [1] Maas AIR, Menon DK, Adelson PD, Andelic N, Bell MJ, Belli A, et al. Traumatic brain injury: Integrated approaches to improve prevention, clinical care, and research. *Lancet Neurol.* 2017;16(12):987-1048.
- [2] Cassidy JD, Carroll LJ, Peloso PM, Borg J, von Holst H, Holm L, et al. Incidence, risk factors and prevention of mild traumatic brain injury: Results of the WHO Collaborating Centre Task Force on Mild Traumatic Brain Injury. *J Rehabil Med.* 2004(43 Suppl):28-60.
- [3] Cancelliere C, Kristman VL, Cassidy JD, Hincapie CA, Cote P, Boyle E, et al. Systematic review of return to work after mild traumatic brain injury: Results of the International Collaboration on Mild Traumatic Brain Injury Prognosis. *Arch Phys Med Rehabil.* 2014;95(3 Suppl):S201-9.
- [4] Chu S-Y, Tsai Y-H, Xiao S-H, Huang S-J, Yang C-C. Quality of return to work in patients with mild traumatic brain injury: A prospective investigation of associations among post-concussion symptoms, neuropsychological functions, working status and stability. *Brain Inj.* 2017;31(12):1674-82.
- [5] Graff HJ, Deleu NW, Christiansen P, Rytter HM. Facilitators of and barriers to return to work after mild traumatic brain injury: A thematic analysis. *Neuropsychological Rehabilitation.* 2020:1-25.
- [6] Watkin C, Phillips J, Radford K. What is a 'return to work' following traumatic brain injury? Analysis of work outcomes 12 months post TBI. *Brain Injury.* 2020;34(1):68-77.
- [7] Bloom B, Thomas S, Ahrensberg JM, Weaver R, Fowler A, Bestwick J, et al. A systematic review and meta-analysis of return to work after mild traumatic brain injury. *Brain Injury.* 2018;32(13-14):1623-36.

- [8] Friedland JF, Dawson DR. Function after motor vehicle accidents: A prospective study of mild head injury and posttraumatic stress. *J Nerv Ment Dis.* 2001;189(7):426-34.
- [9] Libeson L, Downing M, Ross P, Ponsford J. The experience of return to work in individuals with traumatic brain injury (TBI): A qualitative study. *Neuropsychological Rehabilitation.* 2020;30(3):412-29.
- [10] Sveen U, Guldager R, Soberg HL, Andreassen TA, Egerod I, Poulsen I. Rehabilitation interventions after traumatic brain injury: A scoping review. *Disability and Rehabilitation.* 2020:1-8.
- [11] Alves DE, Nilsen W, Fure SCR, Enehaug H, Howe EI, Løvstad M, et al. What characterises work and workplaces that retain their employees following acquired brain injury? Systematic review. *Occup Environ Med.* 2020;77(2):122-30.
- [12] Muenchberger H, Kendall E, Neal R. Identity transition following traumatic brain injury: A dynamic process of contraction, expansion and tentative balance. *Brain Inj.* 2008;22(12):979-92.
- [13] Mani K, Cater B, Hudlikar A. Cognition and return to work after mild/moderate traumatic brain injury: A systematic review. *Work.* 2017;58(1):51-62.
- [14] Shames J, Treger I, Ring H, Giaquinto S. Return to work following traumatic brain injury: Trends and challenges. *Disabil Rehabil.* 2007;29(17):1387-95.
- [15] Arango-Lasprilla JC, Zeldovich M, Olabarrieta-Landa L, Forslund MV, Núñez-Fernández S, von Steinbuechel N, et al. Early predictors of employment status one year post injury in individuals with traumatic brain injury in Europe. *J Clin Med.* 2020;9(6).
- [16] Howe EI, Andelic N, Perrin PB, Røe C, Sigurdardottir S, Arango-Lasprilla JC, et al. Employment probability trajectories up to 10 years after moderate-to-severe traumatic brain injury. *Front Neurol.* 2018;9:1051.

- [17] Brunger H, Ogden J, Malia K, Eldred C, Terblanche R, Mistlin A. Adjusting to persistent post-concussive symptoms following mild traumatic brain injury and subsequent psycho-educational intervention: A qualitative analysis in military personnel. *Brain Inj.* 2014;28(1):71-80.
- [18] Levack WMM, Kayes NM, Fadyl JK. Experience of recovery and outcome following traumatic brain injury: A metasynthesis of qualitative research. *Disabil Rehabil.* 2010;32(12):986-99.
- [19] Walker WC, Marwitz JH, Kreutzer JS, Hart T, Novack TA. Occupational categories and return to work after traumatic brain injury: A multicenter study. *Arch Phys Med Rehabil.* 2006;87(12):1576-82.
- [20] Hawthorne G, Gruen RL, Kaye AH. Traumatic brain injury and long-term quality of life: Findings from an Australian study. *Journal of Neurotrauma.* 2009;26(10):1623-33.
- [21] Johansson U, Tham K. The meaning of work after acquired brain injury. *Am J Occup Ther.* 2006;60(1):60-9.
- [22] Stergiou-Kita M, Yantzi A, Wan J. The personal and workplace factors relevant to work readiness evaluation following acquired brain injury: Occupational therapists' perceptions. *Brain Injury.* 2010;24(7/8):948-58.
- [23] Johansson AEM, Haugstad T, Berg M, Johansson U. Participation in the workforce after a traumatic brain injury: A matter of control. *Disability & Rehabilitation.* 2016;38(5):423-32.
- [24] Lundqvist A, Samuelsson K. Return to work after acquired brain injury: A patient perspective. *Brain Injury.* 2012;26(13-14):1574-85.
- [25] Ellingsen KL, Aas RW. Work participation after acquired brain injury: Experiences of inhibiting and facilitating factors. *International Journal of Disability Management.* 2009;4(1):1-11.
- [26] Donker-Cools B, Schouten MJE, Wind H, Frings-Dresen MHW. Return to work following acquired brain injury: The views of patients and employers. *Disability and Rehabilitation.* 2018;40(2):185-91.

- [27] Gourdeau J, Fingold A, Colantonio A, Mansfield E, Stergiou-Kita M. Workplace accommodations following work-related mild traumatic brain injury: What works? *Disability and Rehabilitation*. 2020;42(4):9.
- [28] Roessler RT, Rumrill Jr PD, Rumrill SP, Minton DL, Hendricks DJ, Sampson E, et al. Qualitative case studies of professional-level workers with traumatic brain injuries: A contextual approach to job accommodation and retention. *Work*. 2017;58:3-14.
- [29] Corbiere M, Villotti P, Lecomte T, Bond G, Lesage A, Goldner E. Work accommodations and natural supports for maintaining employment. *Psychiatric Rehabilitation Journal*. 2014;37:90-8.
- [30] Gates LB, Akabas SH. Accommodation as a social process. In: Schultz IA, Rogers ES, editors. *Handbook of accommodation*. New York: Springer; 2011. p. 373-92.
- [31] Thompson JR, Bradley VJ, Buntinx WHE, Schalock RL, Shogren KA, Snell ME, et al. Conceptualizing supports and the support needs of people with intellectual disability. *Intellect Dev Disabil*. 2009;47(2):135-46.
- [32] Verdugo MA, Aguayo V, Arias VB, García-Domínguez L. A systematic review of the assessment of support needs in people with intellectual and developmental disabilities. *Int J Environ Res Public Health*. 2020;17(24):9494.
- [33] Nordenfelt L. *The concept of work ability*. Brussels: Peter Lang Publishing; 2008.
- [34] Cleveland JN, Barnes-Farrell JL, Ratz JM. Accommodation in the workplace. *Human Resource Management Review*. 1997;7(1):77-107.
- [35] Kirsh B, Stergiou-Kita M, Gewurtz R, Dawson D, Krupa T, Lysaght R, et al. From margins to mainstream: What do we know about work integration for persons with brain injury, mental illness and intellectual disability? *Work*. 2009;32(4):391-405.
- [36] Karasek R, Theorell T. *Healthy work: Stress, productivity, and the reconstruction of working life*. [New York]: Basic Books; 1990.

- [37] Schaufeli W, Salanova M. Work engagement, an emergent psychological concept and its implications for organizations. In: Gilliland S, Steiner D, Skalacki D, editors. *Managing social and ethical issues in organizations*. London: Information Age Publishing; 2007. p. 135-77.
- [38] Frøyland K, Schafft A, Spjelkavik Ø. Tackling increasing marginalization: Can support-side approaches contribute to work inclusion? In: Hvid H, Falkum E, editors. *Work and wellbeing in the Nordic countries: Critical perspectives on the world's best working life*. London: Routledge; 2019.
- [39] Enehaug H, Spjelkavik Ø, Falkum E, Frøyland K. Workplace inclusion competence and employer engagement. *Nordic Journal of Working Life Studies*. 2021.
- [40] Howe EI, Langlo KS, Terjesen HCA, Roe C, Schanke AK, Soberg HL, et al. Combined cognitive and vocational interventions after mild to moderate traumatic brain injury: Study protocol for a randomized controlled trial. *Trials*. 2017;18(1):483.
- [41] Howe EI, Fure SCR, Løvstad M, Enehaug H, Sagstad K, Hellstrøm T, et al. Effectiveness of combining compensatory cognitive training and vocational intervention vs. treatment as usual on return to work following mild-to-moderate traumatic brain injury: Interim analysis at 3 and 6 month follow-up. *Frontiers in Neurology*. 2020;11(1414).
- [42] Fure SCR, Howe EI, Andelic N, Brunborg C, Sveen U, Røe C, et al. Cognitive and vocational rehabilitation after mild-to-moderate traumatic brain injury: A randomised controlled trial. *Ann Phys Rehabil Med*. 2021;64(5):101538.
- [43] COPSOQ. Copenhagen Psychosocial Questionnaire (COPSOQ). A questionnaire on psychosocial working conditions, health and well-being in three versions Copenhagen: Psychosocial Department, National Institute of Occupational Health, Copenhagen, Denmark; 2003. Available from: <https://www.copsoq-network.org/>
- [44] Yin RK. *Case study research: Design and methods*. 5th ed. Los Angeles: Sage 2014.

- [45] Patton MQ. *Qualitative research & evaluation methods*. 3rd ed. Thousand Oaks, CA: Sage Publications; 2002.
- [46] Creswell JW. *Qualitative inquiry and research design: Choosing among five approaches*. 3rd ed. Los Angeles: Sage; 2013, p. 246.
- [47] STAMI. *Faktabok om arbeidsmiljø og helse* [Fact book on working environment and health]. Oslo: Statens arbeidsmiljøinstitutt; 2018.
- [48] Buch R, Nerstad CGL, Säfvenbom R. The interactive roles of mastery climate and performance climate in predicting intrinsic motivation. *Scand J Med Sci Sports*. 2017;27(2):245-53.
- [49] Kiernan WE, Schalock RL. *Economics, industry, and disability: A look ahead*. Baltimore: Paul H. Brookes Publishing Co.; 1989.
- [50] McDowell C, McDowell C, Fossey E, Fossey E. Workplace accommodations for people with mental illness: A scoping review. *J Occup Rehabil*. 2015;25(1):197-206.
- [51] Yasuda S, Wehman P, Targett P, Cifu D, West M. Return to work for persons with traumatic brain injury. *Am J Phys Med Rehabil*. 2001;80(11):852-64.
- [52] Johansson AEM, Haugstad T, Berg M, Johansson U. Participation in the workforce after a traumatic brain injury: A matter of control. *Disabil Rehabil*. 2016;38(5):423-32.
- [53] Kensbock JM, Boehm SA, Bourovoi K. Is there a downside of job accommodations? An employee perspective on individual change processes. *Front Psychol*. 2017;8:1536-.
- [54] Andersen NA, Caswell D, Larsen F. A new approach to helping the hard-to-place unemployed: The promise of developing new knowledge in an interactive and collaborative process. *European Journal of Social Security*. 2017;19(4):335-52.
- [55] West M, Targett P, Wehman P, Cifu G, Davis J. Separation from supported employment: A retrospective chart review study. *Disabil Rehabil*. 2015;37(12):1055-9.

- [56] Drake RE, Bond GR, Becker DR. Individual placement and support: An evidence-based approach to supported employment. New York: Oxford University Press; 2012.
- [57] Fleminger S, Ponsford J. Long term outcome after traumatic brain injury: More attention needs to be paid to neuropsychiatric functioning. *BMJ: British Medical Journal*. 2005;331(7530):1419-20.
- [58] Stacy MA, Stefanovics ER, R. Reasons for job loss among homeless veterans in supported employment. *American Journal of Psychiatric Rehabilitation*. 2017(20):16-33.
- [59] Bredgaard T. Employers and active labour market policies: Typologies and evidence. *Social Policy and Society*. 2017:1-13.
- [60] Malterud K, Siersma VD, Guassora AD. Sample size in qualitative interview studies: Guided by information power. *Qual Health Res*. 2016;26(13):1753-60.

Tables

Gender		Position*)		Sector		Blue collar/white collar	
Women	Men	Managers	Employees	Private	Public	Blue	White
19	19	14	24	27	11	6	32

*Table 3 Informants with TBI by background variables, n. *) The group of informants with TBI consisted of persons in both subordinate and leading positions (managers).*

Informant category	Dropout at T1	Dropout at T2	Total dropout out of possible interviews
Employees with TBI	5	7	12 out of 76
Managers	11	20	31 out of 76
Total	16	27	43 out of 152

Table 4 Number of informant interview drop-outs by interview time (T1, T2) and informant category, n

Figures

Figure 1 Accommodation in the organizational and psychosocial work environment

Accommodation in the organizational work environment	Accommodation in the psychosocial work environment
<ul style="list-style-type: none">• Work tasks, position, working hours, organization of work and work demands• Physical arrangements	<ul style="list-style-type: none">• Social support• Supportive management

Appendices

Appendix 1: Accommodation in the organizational work environment and in the psychosocial work environment

1: Accommodation in the organizational work environment					2: Accommodation in the psychosocial work environment		
A: Organizational work environment					B: Physical arrangements	A: Social support and social relations	B: Supportive management
WORK TASKS: gradual return to work, adapted and changed work tasks, simpler work tasks, fewer work tasks, reducing complex work tasks, reducing stressful work tasks, reducing concentration- and memory-demanding tasks, reducing stressful work tasks, more structured work tasks, more structured work task expectations	POSITION: reduced position, work in addition to expected staffing in teams	WORKING HOURS: flexible presence, avoid stressful working hours	ORGANIZATION OF WORK: adjust shifts, more breaks, reduce the number of meetings, more digital meetings, define work area, reduce customer contact, work at home, adjust pace, put in extra resources, put in substitutes, co-workers take over work tasks	REQUIREMENTS: limit deadlines, reduce earnings and delivery requirements, reduce responsibility	measures related to light, noise, hearing and vision, raising and lowering tables, screen adaptation, reduced screen usage, obtaining a massage chair, obtaining a mattress, physical protection, training during working hours	help and support from co-workers, greetings, showing interest or compassion, inclusion initiative	facilitation initiative, attention, follow-up interviews, competence development initiative

Appendix 2: Informant overview

Informants with TBI, by time point, identified accommodation, and background variables

Case Nr		Accommodation	Gender	RTW (%)	Position	White /Blue collar	Sector	Industry
1	T1	1a, 2a, 2b	M	30	Manager	W	Public	Public adm
	T2	1a, 2b		100	Manager			
2	T1	1a, 1b	F	15	Manager	W	Private	Industry
	T2	1a, 1b		40	Employee			
3	T1	1a, 1b, 2a, 2b	M	100	Manager	W	Private	Industry
	T2	1b, 2a, 2b		100	Manager			
4	T1	1a, 2b	F	50	Manager	W	Private	Retail
	T2	1a, 1b, 2b		80	Manager			
5	T1	1a, 1b, 2b	F	30	Employee	W	Private	Insurance
	T2	1a, 1b, 2b		80	Employee			
6	T1	1a, 1b	F	20	Employee	W	Private	Insurance
	T2	1a, 1b		30	Employee			
7	T1	1a, 1b, 2a, 2b	M	60	Employee	W	Public	Public adm
	T2	1a, 2b		100	Employee			
8	T1	1a, 1b, 2a, 2b	F	30	Employee	W	Public	Higher education
	T2	-			Unempl			
9	T1	1a, 2a, 2b	F	50	Employee	W	Public	Public adm
	T2	0		100	Manager			
10	T1	1a	M	50	Employee	B	Private	Business services
	T2	1b		100	Employee			
11	T1	1a, 2a, 2b	F	100	Manager	W	Private	Industry
	T2	2b		100	Manager			
12	T1	1a, 2a, 2b	M	100	Manager	W	Public	Health
	T2	0		100	Manager			
13	T1	2a	M	40	Employee	B	Private	Building & constr
	T2	1a		80	Employee			
14	T1	1a, 1b, 2a, 2b	F	20	Manager	W	Public	Health
	T2	1a, 1b, 2a, 2b		40	Employee			
15	T1	1a, 2a, 2b	F	60	Employee	W	Public	Public adm
	T2	1a, 1b, 2b		100	Employee			
16	T1	1a, 2a, 2b	F	100	Employee	W	Private	Business services
	T2	1a, 1b, 2a, 2b		100	Employee			
17	T1	1a, 2a, 2b	M	40	Employee	B	Private	Building & constr
	T2	Unavailable						
18	T1	1a, 2a, 2b	F	30	Employee	B	Public	Retail
	T2	2a		80	Employee			
19	T1	1a, 1b, 2a, 2b	M	80	Employee	W	Private	Industry
	T2	1a, 1b, 2a, 2b		50	Employee			
20	T1	1a, 1b, 2a	M	30	Manager	W	Private	Business services
	T2	0		100	Manager			
21	T1	1a, 1b	F	30	Manager	W	Private	Business services
	T2	1a, 1b		100	Manager			
22	T1	1a, 1b, 2a, 2b	M	50	Employee	W	Private	Business services
	T2	1b		100	Employee (new job)			
23	T1	1a, 1b, 2a, 2b	M	50	Manager	W	Private	Business services
	T2	0		100	Manager			
24	T1	1a, 1b, 2a, 2b	F	50	Employee	W	Public	Public adm
	T2	1a, 1b, 2b		60	Employee			

25	T1	1a, 2a, 2b	M	20	Manager	W	Private	Business services
	T2	-		0	Unempl			
26	T1	1a, 2a, 2b	M	80	Employee	W	Public	Public adm
	T2	Unavailable						
27	T1	1a, 1b	M	50	Employee	W	Private	NGO
	T2	1a, 1b		50	Employee			
28	T1	1a, 1b, 2a, 2b	F	30	Manager	W	Private	Restaurant
	T2	0		100	Employee		Public	Education
29	T1	2a	F	100	Employee	W	Public	Education
	T2	0		100	Employee (new job)			
30	T1	1a, 1b, 2a, 2b	M	60	Manager	W	Private	Retail
	T2	1a, 1b, 2a, 2b		100	Manager			
31	T1	1a, 2b	F	30	Employee	W	Private	NGO
	T2	1a, 1b, 2b		60	Employee			
32	T1	1a, 1b, 2a, 2b	M	100	Employee	W	Private	Business services
	T2	Unavailable						
33	T1	1a, 2b	F	70	Employee	W	Public	Research
	T2	1a, 1b		100	Employee			
34	T1	1a, 2a, 2b	M	20	Employee	W	Private	Business services
	T2	1b		100	Employee			
35	T1	1a, 2a, 2b	M	20	Employee	B	Private	Health & social
	T2	1a, 1c		40	Employee			
36	T1	2a, 2b	M	50	Manager	W	Private	Building & constr
	T2	1a, 2a, 2b		100	Manager			
37	T1	1a, 2a	F	100	Employee	B	NGO	NGO
	T2	1a, 1b, 2a, 2b		40	Employee (new job)			
38	T1	1a, 1b	F	20	Employee	W	Private	Retail
	T2	1a		100	Employee			