

Stay at work after a period of disability due to an occupational injury: A complex process marked by social exchanges

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Conflict of interest

None of the authors has any conflict of interest to declare.

Data availability

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

Ethics

All procedures performed in studies involving human participants were per the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all individual participants included in the study. Ethical certification was obtained from the Research Ethics Committee of the Integrated University Health and Social Services Center of the Capitale-Nationale (CIUSSS-CN), no 2020-1937.

Authors' contributions

AL, MJD and MFC contributed to the study conception and design. Material preparation, data collection and analysis were performed by AL and CG. Literature search was performed by AL and RBM. The first draft of the manuscript was written by AL and all the authors commented on the previous versions of the manuscript. All the authors read and approved the final manuscript.

Abstract (150-250 words)

Purpose. Rooted in a social exchange lens, this study aimed to explore the interactions between the factors influencing stay at work after a period of disability due to an occupational injury. *Methods.* Based on a descriptive interpretative research design, interviews with 15 participants (i.e., representatives of workers, workplaces, insurers, and the health care system) were conducted to gather their perspectives about stay at work. Qualitative data was analyzed through thematic analysis. *Results.* Ten different factors interacting together and influencing stay at work were identified. These factors prevail either during stay at work or previously. They are either related to the person (personal resources, occupation outside of work), environment (accommodations, support, access to rehabilitation services) or interaction between the person and her/his environment (perceptions, leeway, communication and information), whether it concerns the workplace, health services or insurance. *Conclusions.* This study contributes to the advancement of knowledge concerning two main themes: 1) the importance of considering social exchanges as factors of success, and 2) the importance of considering the stay at work within a larger process.

Keywords (5): stay at work, qualitative research, social exchange, occupational rehabilitation, return to work.

Introduction

Work is not without risk for people's health. Due to various factors such as an increase in the labor force [1] or the overall aging of the workforce [2], occupational injuries and their consequences have tended to increase over the years. After a decreasing trend between 2013 and 2015, the number of occupational injuries in Canada has increased drastically since 2015, with the number of recognized occupational injuries rising by 23% between 2015 and 2019 [3]. The length of the periods of disability¹ has also increased over the past decade, with the number of days lost per worker increasing from 7.7 days in 2011 [4] to 9.5 days in 2020 [5]. Most of the workers who have suffered an occupational injury gradually resume their roles, including work. However, the number of workers with occupational injuries requiring rehabilitation services before they can resume work went up by 3% between 2006 and 2012 [6]. Between 2010 and 2012, concerning the occupational injuries suffered by workers, an annual average of 6,200 required rehabilitation services, which represents 7% of all injuries [6]. Interestingly, nearly 15% of workers who received rehabilitation services following an occupational injury experience a relapse, a recurrence or a worsening of their condition after their return to work [6, 7]. This causes concern since an unsuccessful return-to-work attempt affects the prevention of prolonged disability [8]. In the process, it is important to consider the factors that contribute to stay at work.

What «stay at work» means?

There is no consensus in the literature regarding the definition of stay at work after a period of disability. For example, for Etuknwa et al. (2019), stay at work is a return-to-work, full time or part-time, for at least three months without relapse or recurrence of absence due to disability, whether in a new employment or in the original one [9]. For Lammerts et al. (2016), stay at work means that the individual, employee or self-employed, has not experienced a period of disability at work for more than 14 consecutive days in the last six months [10]. Hoefsmith et al. (2016) [11] and Steenstra et al. (2003) [12] define the concept as working in a sustained way for four consecutive weeks without relapse (i.e., without disability leaves) part-time or full time.

Despite being practical and intelligible, these definitions are essentially based on the "length of time" during which workers can perform their work upon returning from a period of disability. They do not consider the multiple factors influencing the complex situations that workers experience. Hence, for Young (2010), stay at work is not defined solely by the fact of holding a position for a defined number of days after a period of disability; various factors must be considered in evaluating not only the success of stay at work, including the ability to do the required work, but also the perception of the risks, physical or psychological. [13].

Stay at work should not be seen as an isolated event, but understood as part of a process in which the worker can progress as well as regress [13, 14]. In addition, stay at work should not be considered as an end, but as a process influenced by factors related to the person and the workplace, as well as by other environmental

¹ The period of disability is the period during which the worker is unable to carry out her/his normal work duties due to the occupational injury. A paying agent or insurer generally provides financial support.

factors such as rehabilitation [15]. Some authors divide this process into four key phases, starting from the first day the workers are disabled (phase 1), through the return (phase 2), stay at work (phase 3), until the moment they try to move forward and obtain new functions (phase 4), whether in their original job or in a new environment [14]. A successful stay at work, according to Young et al. (2005) [14], represents the moment when workers strive to maintain an acceptable goal shared between them and the employer, such as a sustainable recovery in productivity at the wages previously achieved. This objective may be revised as the process unfolds. During this phase, workers may achieve constant performance, be satisfied with the situation, and wish to keep it as it is; this represents successful maintenance. Workers can then move on to new functions, if they wish to. A recent study ascribed the success of this process to upstream factors such as the primary prevention interventions in the workplace and the quality of the injured worker's rehabilitation [15]. Stay at work may then even be seen as a part of a larger process aiming at a healthy participation in work.

Factors influencing stay at work

While authors have presented the factors promoting a prompt return-to-work (e.g., psychological assistance [16], early activation [16], workplace interventions, etc. [17]), the literature provides little information on those that favor stay at work following a period of disability due to an occupational injury. Lines of reflection can, however, be highlighted.

For instance, authors suggest that worker-related factors influence stay at work, such as having a higher level of education [9] and a higher economic status [9, 10]. The literature also reports personal characteristics of the worker influencing stay at work, such as the determination of the worker and ability to adapt [18], ability to set limits with colleagues [19], a positive attitude and a strong sense of personal efficiency [9]. The state of health, for example pain or fatigue, also influences the stay at work [20]. Age has a direct impact on the psychological and physical capacities of workers [21]; being younger has a positive influence on stay at work [9, 10].

Workplace characteristics, such as support by peers and supervisors [18, 19, 21] and type of work [20] have also been identified as influences on stay at work in the literature.

Insurance too influences stay at work, with its rules and procedures [21].

Support from health professionals appears to be a factor favoring stay at work after a period of disability due to an occupational injury [18]. Regarding rehabilitation interventions promoting stay at work, a few are specifically described in scientific literature, except therapeutic return-to-work, which aims at return-to-work after an occupational injury by involving the worker and the workplace [22]. This intervention presents four components namely the a) assessment of the incapacity situation at work, b) worker's preparation to return-to-work, c) support of the workers' active engagement in the return-to-work and, finally, d) stay at work [23-25]. The main objective of the stay at work component is to foster sustainable and healthy participation in the workplace, avoiding relapse [25]. However, this component is considered optional in the intervention of the therapeutic return-to-work [the other three components being mandatory] because of the context (e.g.,

insurers' rules) which does not facilitate rehabilitation services during stay at work [25]. To date, scarce information is available in the writings to fully understand the factors influencing the component of stay at work.

Although the success of stay at work is influenced by the interactions between the worker and her/his environment [26], the current literature offers a list of factors related either to the worker or the environment, without highlighting the interactions that unite them. In addition, the current literature does not offer a clear picture of when these factors come into play, in the spirit that stay at work is part of a larger process. According to the available knowledge, the picture of the factors influencing workers' stay at work after a period of disability due to an occupational injury remains incomplete.

The social exchange theory

Since the factors influencing the stay at work are put in place by social actors (e.g., workers, supervisors, insurers, health care professionals) at different stages of the process (i.e., preparation, return, stay), the social exchange theory could make it possible to address this subject of study so as to fill the gaps in the current state of knowledge. The social exchange theory [27] and its norm of reciprocity [28] are recognized as a dominant concept to study social interactions, such as those related to work [29, 30]. In social exchange relationships, individuals are interested in maintaining a balance between their investments (e.g., efforts provided) and the benefits received (e.g., recognition). The social exchange theory predicts how an action or behavior initiated towards an individual (e.g., job accommodation), which may be positive or negative, can engender another action, again positive or negative, from that individual (e.g., involvement in the stay-at-work process). Based on this premise, a disabled worker would put more effort into the stay at work process if the work environment also provides effort, and vice-versa. Social exchange implies a desire for reciprocity, which creates a constraint towards an equilibrium between the individuals. This desire for reciprocity serves as a catalyst for social interactions. These reciprocity exchanges may concern diverse resources, attitudes and behaviors, such as security, support, or loyalty [31]. The social exchange theory has been used to document workplace interactions regarding different factors, including mental health at work [e.g., 32] and occupational health and safety [e.g., 33]. As previous authors reported the necessity to consider the social exchanges taking place in the workplace to favor the success of stay at work after a period of disability due to an occupational injury [34, 35], the exploration of stay at work using a social exchange lens seems relevant.

Considering 1) the importance of stay at work to ensure healthy participation of workers who have experienced a period of disability due to an occupational injury, 2) the incomplete portrait of factors influencing stay at work, 3) the lack of information about the interactions intervening throughout the process leading to stay at work, and 4) the social exchanges taking place in a workplace, it is important to carry out research to improve knowledge on this subject. Since scientific literature shows gaps, it is relevant to develop new knowledge based on the perspectives of social actors involved in stay at work. **This study** aimed to

explore the interactions between the factors influencing stay at work after a period of disability due to an occupational injury.

Methods

Design. This study has a descriptive interpretative research design [36, 37]. This qualitative design was chosen because it makes it possible to explore a phenomenon (i.e., the interactions between the factors influencing stay at work) from the perspectives of social actors and to create links between the components of this phenomenon. In addition, authors previously suggested this design allows producing a rich understanding of a phenomenon within its natural context [38-40].

Participants. Four categories of participants involved in the process of stay at work were recruited: 1) representatives of workers (e.g., unions), 2) representatives of workplaces (e.g., human resource managers), 3) insurers, and health care professionals (e.g., occupational therapists) These categories of participants were targeted because of their recognized role concerning prolonged disability at work and its prevention [e.g., 21, 41, 42, 43]. Participants were recruited if they had at least two years of experience in their function and good communication abilities in French. Participants were recruited using a purposive sampling method and selected based on a maximum variation sampling strategy [44]. Attention was paid to obtain diverse profiles in terms of the practice environment, level of training and years of experience. Between 12 and 24 participants were expected to be recruited [45, 46]. Indeed, some authors suggest that, for qualitative studies aiming to describe the perspectives of people sharing a similar reality, interviews with a dozen participants are generally sufficient to achieve saturation. [46]. The final number of participants was adjusted during the study and recruitment stopped when the interviews revealed a redundancy in the sense of the ideas reported by the participants [46]. Ultimately, 15 participants took part in the study.

Procedure. Individual telephonic interviews were conducted according to a guide validated by a pre-test, with two people having the same characteristics as the participants. The interviews, lasting an average of 47.21 ± 11.48 minutes, invited participants to express their views on the factors influencing the process of stay at work after a period of disability due to an occupational injury . Based on real-life situations, participants were invited to discuss the factors influencing stay at work (e.g., obstacles and facilitators, unmet needs, required improvements). Topics covered included the personal factors of workers (e.g., abilities, pain, motivation), rehabilitation interventions (e.g., strengths and challenges), actions of different social actors (e.g., employer, worker, insurer, union) and the characteristics of the context and the job (e.g., type of job, work organization, support). All the interviews were conducted in French and were digitally recorded.

Analysis. The recordings were transcribed verbatim and a thematic analysis strategy [47] was applied to the data corpus, following a five-step process: 1) repeated readings of the data corpus allowing researchers to develop a sense of immersion; 2) initial coding: descriptive codes were assigned to the units of significance found in the corpus; 3) the units of meaning were then transformed into meaningful expressions of the participants' experience; 4) the synthesis of expressions enabled organization of the data in a general structure (the codes [micro level] were grouped into categories [meso level] and/or themes [macro level]); 5) back and

forth movements between the raw data and the general structure enabled clarification and interpretation of the data, while respecting the perspective of the participants. QDA Miner 5 software was used to support the analysis process.

The first five interviews were independently analyzed by two people, who met after analyzing each interview to compare their coding and forge a consensus on codes and structure. This step reduced the risk of bias, by preventing the coding from reflecting the perception of a single person. Coding of subsequent interviews was done by one person and periodical discussions were held between members of the research team. This iterative process of creating successive versions of the structure of the participants' experience was carried out until the members of the research team agreed that the analysis represented the data as closely as possible.

Results

Description of the participants

Of the 15 participants, 14 were female. The sample included three representatives of workers (two from unions and one from a community organization defending workers' rights); two representatives of employers in private enterprises; one representative of a public insurer; and nine rehabilitation professionals (occupational therapists and psychologists working in the public or private sectors). The average age of the participants was 41.87 (27-51) and they had held their position for an average of 13.6 (2-25) years. Due to a technical problem, the recording of the interview of participant 10 was unusable and only interview notes were available to incorporate her ideas in the results. Table 1 shows the descriptive characteristics of the participants.

Table 1. Description of participants

Participant number	Gender	Age (years)	Category of social actors	Experience (years)	Level of education
P01	Female	49	Union representative	22	Masters
P02	Male	49	Worker representative	3	Baccalaureate
P03	Female	27	Rehabilitation professional	2	Masters
P04	Female	37	Rehabilitation professional	15	Baccalaureate
P05	Female	51	Insurer representative	12	Masters
P06	Female	39	Union representative	10	Baccalaureate
P07	Female	31	Rehabilitation professional	4	Masters
P08	Female	39	Employer representative	15	Baccalaureate
P09	Female	44	Rehabilitation professional	10	Masters
P10	Female	50	Rehabilitation professional	25	Baccalaureate
P11	Female	47	Rehabilitation professional	21	Masters
P12	Female	49	Rehabilitation professional	25	Baccalaureate
P13	Female	46	Rehabilitation professional	19	Masters

P14	Female	43	Rehabilitation professional	19	Doctorate
P15	Female	27	Employer representative	2	Baccalaureate

Factors influencing stay at work after a period of disability due to an occupational injury

The analysis of the interviews with the participants enabled highlighting ten factors influencing stay at work after a period of disability due to an occupational injury. These factors are depicted in Figure 1, indicating that they are related to the 1) person, 2) environment or 3) interaction between the person and his/her environment, whether it concerns the workplace, health services or insurance.

In the spirit of the stay at work being part of a process, the analysis of the data made it possible to highlight 1) factors occurring during stay at work, and 2) factors that manifest themselves earlier in the process, but which influence stay at work after an occupational injury.

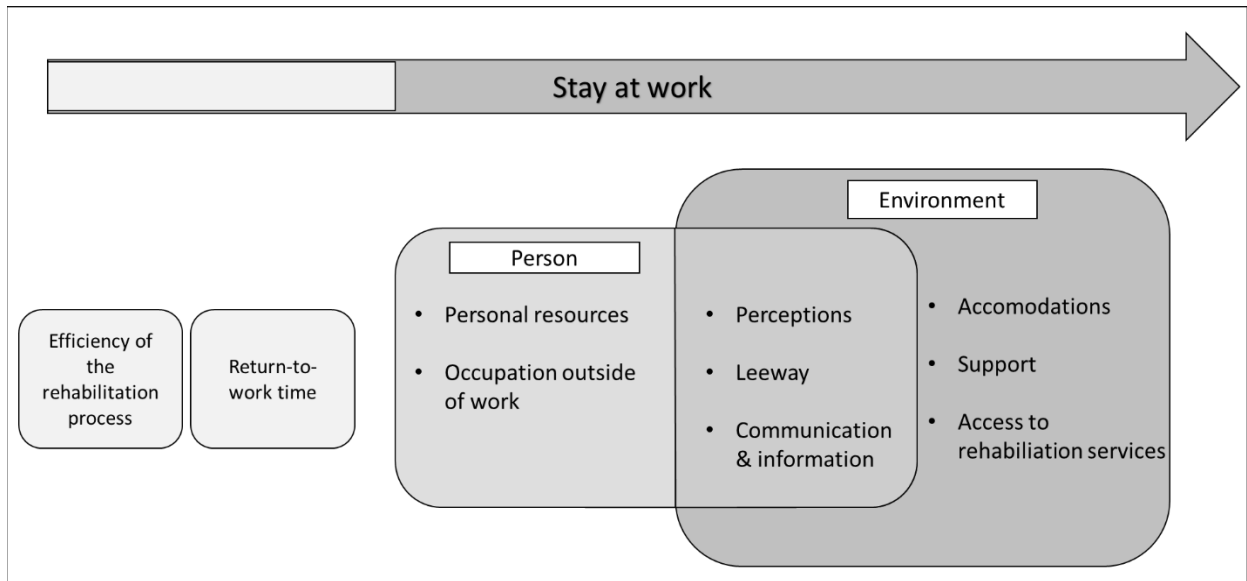


Figure 1. Factors influencing stay at work after a period of disability

Factors occurring during stay at work

A factor that emerged first is *personal resources* regarding occupational health. According to participants, this body of skills and knowledge may include a) pain, energy and stress management, b) adoption of preventive behaviors and c) ability to cope with challenges. A participant stated the importance of these skills for stay at work:

“We know that the pain may return or something else may happen, even if the person can cope with it. [It is important for the worker] to know ‘what to do if the pain increases’, or ‘what are the means to manage it’. We also work on the confidence that the worker has, to

be able to work on herself/himself and not to panic. I think it's something that promotes stay at work.² [P12]³

On the contrary, limited personal resources which may lead to poor adaptation, are described as barriers to stay at work for participants: “Of course people who are passive tend to manage their problems either with medication or even rest. [If they] are really passive, the prognosis is a little less good.” [P13]

The results suggest that the manifestation of these personal resources is influenced by the interaction between the worker and the workplace, as reported by a participant: “We see that if the relationships are negative at work, the worker does not necessarily put all the energy [to succeed in staying at work].” [P09]

Perceptions also emerged from the data as another factor influencing stay at work. Participants stated that these may include workers’ perception, due to incomprehension or lack of information, that employers do not want to help them:

“I don't think it helps the success of stay at work if they [workers] feel that the employer wants to cheat them [...] For example, if the worker gets a dispute [about the disability file], and then she/he has no more information [from the employer]. So, she/he may not want to stay at work because it's not well explained [and it induces bad perceptions].” [P08]

A participant also stated that “for the sake of not appearing to be weak, we [workers] often tend not to verbalize our difficulties.” [P02] This illustrates the fear of being judged, which can lead to behaviors that compromise the success of stay at work. Finally, it seems that the perception of one’s incapability to stay at work is detrimental and needs to be addressed directly:

“Because if the worker is convinced that it will be impossible [to succeed in stay at work], from the moment the worker expresses those kinds of concerns [...] we have to take care of that [to favor stay at work].” [P05]

The issue of perceptions is related not only to the worker, but also to the workplace. For instance, participants reported that some workplaces convey negative bias against workers returning from a period of disability due to an occupational injury. These biases can lead to a feeling of exclusion in the worker, who “feels less integrated [in the team]” [P08] once back to work. In the worst-case scenario, this bias may also cause retaliation against the worker, which can push her/him into quitting the job, as mentioned by a participant: “Some employers give more misery to workers who have already left on disability, for fear of seeing them leave again. Employers say workers who get hurt cost more and they'll harass them until they quit.” [P02] Participants also indicated that misperceptions may be shared by the worker and the workplace, which influence stay at work:

“Sometimes people in the enterprise, and even the worker herself/himself, think that she/he [the worker] is going to resume the job where she/he left off and that it is going to be as before [the period of disability]. People don't realize that it takes a while to readjust.” [P02]

² The factors are exemplified by verbatim extracts from the participants’ interviews. The extracts are a free translation from the original French transcripts.

³ Numbers (1 to 15) in the hooks refer to the participant’s number.

Perceptions, whether they are from the workers or the workplace, must be addressed to promote stay at work. Participants raised the importance of *communication and information* to lessen the negative effects of perceptions on stay at work: “Ideally, employers should have work reintegration programs in which there is education, so that everyone understands the same thing.” [P06]

Implementation of *accommodations*, always linked to the interaction between the worker and the workplace, may positively influence stay at work according to participants. However, participants put forth multiple factors that may influence the implementation of such accommodations. Some of these factors are a) costs, b) union agreements, c) administrative formalities, d) workers’ competencies and limitations, e) job functions, f) labor shortage and g) perceived complexity of the implementation. A participant indicated that asking for accommodations may be very energy-intensive and discouraging for the worker:

“You go back to work, and you think ‘ok I’m going to go back to normality’ and then you realize that you have to engage in another fight to modify your working conditions, so as not to hurt yourself again. Workers don’t necessarily have that energy and mental strength to say ‘ok, I have to fight again’.” [P06]

Some participants also noted that the establishment of accommodation is sometimes very complex, considering the nature of the worker's incapacity and the tasks specified by the work. For example, psychological injuries would be an obstacle to stay at work because of the difficulties of adapting the work situations concerning this type of injury, as revealed in this extract: “The biggest failures [regarding stay at work] happen when it’s hard to adapt. I would say it is when it concerns psychological damage.” [P06].

Physical impairments may also lead to issues regarding accommodations, particularly when there is little room for changes:

“It was in terms of postures. It was hard to adapt ... it was in the construction industry, so he [the worker] was standing all the time. There were a few times he could kneel when doing things at floor level. Otherwise, most of the time he was standing, and he didn’t have a way to adapt.” [P04]

According to participants, the implementation of accommodations is largely influenced by the context and background of the worker in the organization. For example, if employers recognize the “experience, seniority, and maturity” [P12] of the worker, they may be more inclined to accommodate the workers, “to preserve her/his contribution to the team.” [P12], or “when the relations are good, employers go out of their way to accommodate workers” [P02]. On the contrary, if the worker “is not a model employee, [...], it is possible that the employer imposes more constraints [on the possibilities of accommodation]” [P14]. The results thus suggest a link of influence between the *personal resources* of the worker and the accommodation efforts by the employer.

Participants indicated that *Support* from the environment is a relevant factor influencing stay at work after a period of disability due to an occupational injury. Different ways of expressing support were named by participants, such as a) being proactive in offering help to the worker, whether in work tasks or administrative

procedures related to the occupational injury and its consequences, b) showing empathy towards the worker and c) respecting the worker's limits. Participants mentioned that this support may come from different social actors, including employers, colleagues, union representatives, insurers, and health professionals. For instance, a participant described the positive outcomes related to the support the union may offer to the worker: "If we go to workplaces [...] where the union fights for the workers, we make gains and can adapt workstations." [P06]

Conversely, lack of support is described as detrimental to stay at work, as expressed by a participant: "It is discouraging to get up every morning and go to work with people you don't like or who don't seem to like you. At the first opportunity, people often go back on work stoppage." [P13].

Our analysis suggests that a lack of support may be caused by a lack of knowledge on the part of colleagues about the stay at work process. Colleagues can be suspicious of the worker, since "they have the impression that the worker who has accommodations does less while being paid the same salary, which creates a feeling of injustice". [P04] **Communication and information** are required to foster supportive stay at work: "The employer must explain to colleagues and supervisors [...] what will happen to the worker who has experienced the disability." [P05]

Based on the interaction between two key factors, the worker's capacities and the work requirements, **leeway** appears to be a crucial factor influencing stay at work according to participants. The participants noted the issue of the lack of means to increase the leeway when the workers' capacities remain limited in the long term.

"When you can't reduce the gap between the capacities of the person and the demands of the job when you can't adapt, it's difficult. For example, when you have to maintain a posture [to do your job] and there is no way to change it, that is often a problem." [P04]

This excerpt also suggests the link of influence between the possibilities of **accommodations** and leeway. As most participants discussed leeway in the workplace, they also recognized the importance of the **occupations outside of work**. They raised the necessity to permit sufficient room to fulfill personal obligations. Indeed, the "difficulty in maintaining a certain balance, reconciling work and other lifestyle habits." [P12], which may be summarized as occupational imbalance, is considered detrimental to stay at work.

Access to rehabilitation services during stay at work was also mentioned by some participants as an influencing factor. Vocational rehabilitation expertise and support are limited for the worker and the employer during stay at work because of the context (e.g., insurer's rules). In this situation, a participant representing an employer feels somewhat left on her own: "I don't know about other workplaces, but once the person has returned to work, if we have a problem [regarding the stay at work process], whom do we refer to? It would be nice to have more [professional] support for longer" [P15]

Factors occurring prior to stay at work

Participants reported that *Return-to-work time* influences stay at work. Participants explained that a too hasty return-to-work may be detrimental to stay at work, especially if it is done “too quickly for the worker's state of health” [P02] or because of pressure: “Often, when the return-to-work is rushed, it has consequences. People get hurt not long afterward or things like that. Sometimes because of pressure from employers [...]” [P02] Similarly, delayed return-to-work may limit stay at work because “it is difficult if we are stopped for a long period to resume work where we left. And if there have been lots of changes [during the absence], to reintegrate everything without a fair deadline or appropriate support may lead to complications.” [P02] The participants thus suggest the importance of returning to work when the worker's situation allows it and not because of external pressure. Similarly, participants also believe that a work stoppage that lasts over time requires additional preparation to put in place the conditions favoring the stay at work.

Because services are scarcer once the return to work begins, participants noted the importance of the *efficiency of the rehabilitation process* to facilitate stay at work. Temporary assignment and gradual return-to-work are seen as facilitators for stay at work, as they allow to “[develop] skills and increase their [workers’] abilities to do the required tasks or keep the abilities they had before” [P01]. An optimal rehabilitation process is also described as based on the 1) collaboration between the worker and the social actors, 2) possibility for workers to transfer the skills acquired during rehabilitation to their work reality and 3) holistic management of the worker’s situation. For instance, addressing the worker’s *occupations outside of work* as well as difficulties outside of the workplace during the rehabilitation may have positive outcomes for the worker, and eventually for stay at work: “We tried to find strategies to deal with the various personal problems, and that helped with the mood. It also reduced the symptoms of post-traumatic stress disorder. It helped him [the worker] to project himself at work in the future” [P13].

Discussion

This qualitative study aimed at identifying the factors influencing the stay at work after a period of disability due to an occupational injury. Our results converge towards those of previous authors who indicated that both person-related factors (e.g., personal resources)[9, 18, 19] and environmental factors (e.g., support)[18, 19, 21] influence return-to-work success. Where our results go further, it is in the interaction which acts between the social actors bringing out new factors such as perceptions. For example, our results suggest that the interaction of the worker and other environmental systems fuels perceptions. Thus, the issue of perceptions is no longer the sole responsibility of the worker. Our results also made it possible to highlight the complexity of the stay at work process in which different social actors are involved at different times, as exposed in previous work [13, 15]. This study contributes to the advancement of knowledge concerning two main themes: 1) the importance of considering social exchanges as factors of success of stay at work, and 2) the importance of considering the stay at work within a larger process.

Stay at work: the importance of social exchanges

The literature suggests that the success of stay at work depends on the interaction between the worker and her/his environment [26]. Although the environment involves different systems, the workplace system is particularly influential for stay at work. Indeed, the results of this study suggest that factors linked to the worker and the workplace are in constant mutual interaction in the stay at work process. This interaction between the worker and the workplace can be understood by the social exchange theory [27, 28]. Indeed, this theory may help explain the mechanisms that govern social exchanges between individuals during stay at work. For example, if an employer offers resources (e.g., support or accommodations) to a worker that foster her/his stay at work, this leads to diverse behaviors by this worker to balance the reciprocity of contributions towards the organization. Similarly, if a worker is proactive in the stay at work process and demonstrates appropriate behaviors and attitudes towards colleagues and the employer, the chances of receiving support and accommodation efforts in return are greater. However, if the employer or the employee remains passive and expects a positive action from the other before reacting to it, the exchanges will not help to promote stay at work, in the interest of the two parts. Given the dynamics of social exchange and the reciprocity of resources and behaviors, it is important to break the negative cycle that can settle in a workplace and to initiate positive behaviors to generate reciprocal behaviors.

On a practical level, the results of this study suggest that rehabilitation professionals could play a key role in promoting a positive dynamic of social exchanges between the worker and the workplace. For example, by being involved longer with the worker-employer dyads during the stay at work, professionals could, on the one hand, ensure that workers receive the support required to invest in their work. On the other hand, rehabilitation professionals could support employers better in the implementation of accommodations, favoring their openness to the worker's needs. Since rehabilitation professionals can intervene both with the worker and her/his work environment, they are the professionals of choice to invite the parties to simultaneously involve themselves regarding stay at work, to put in place the conditions conducive to a successful social exchange process. This idea of the simultaneous involvement of the worker and the employer in the stay at work is consistent with the vision of the shared responsibility for the management of occupational health and safety [e.g., 48] as well as the premises of emerging models concerning staying at work [e.g., 49]. Although these avenues of explanation will need to be validated by research, it is possible to suggest that the role of rehabilitation professionals could gain to expand within the stay at work process to have beneficial effects for the workers' health.

By understanding the mechanisms underlying the interactions between the factors influencing stay at work, it will be possible to find innovative solutions for improvement. To our knowledge, the theory of social exchange [27] and the norm of reciprocity [28] have been little used to understand the interactions concerning stay at work and the process. As rehabilitation professionals have the expertise to intervene in respect of the ten factors influencing stay at work, they stimulate reciprocity to encourage positive exchanges between the protagonists regarding stay at work. This may be an avenue for future to explore.

Stay at work: the importance of seeing it as a process

The results of our study suggest that social actors' perspectives shed light on the complexity of stay at work, being influenced by the interaction of various factors throughout a complex process. Although the factors acting directly on the stay at work have been identified (e.g., leeway), it seems that other factors acting upstream (e.g., the efficiency of the rehabilitation) are also of particular interest. This finding suggests that stay at work is a part of a larger process in which social actors implement actions. This idea was also raised in a recent study on return to work after an employment injury in small and medium-sized enterprises [15]. The authors suggest that the success of stay at work is influenced not only by actions aimed specifically at this goal, but also by actions that precede or succeed the action. For instance, they suggest that workplace practices aimed at preventing occupational injuries or improvement actions taken by enterprises after analyzing an employment injury situation, can influence the success of stay at work. Other authors have concurred, suggesting that stay at work is part of a dynamic process of multiple actions implemented by social actors [13, 14]. These results may lead to the conclusion that the stay at work is part of an integrated prevention process, in which the combination of actions in primary (i.e., to preventing their occurrence), secondary (i.e., reducing their duration) and tertiary (i.e., preventing prolonged disability) prevention coexist to optimize the healthy work participation of people [48]. It is therefore crucial to consider stay at work within a global process and to be aware that actions of social actors occurring at different times regarding stay at work before, during or after, have an influence.

Strengths and limitations

This study contributes to the advancement of knowledge in occupational rehabilitation, but some limitations must be mentioned. First, the sample includes a high proportion of rehabilitation professionals, compared to the other categories of social actors, which may have tainted the research results. Caution in interpreting results is required. Although the number of participants was appropriate to attain data saturation, transferability of the results to other contexts than Canada cannot be guaranteed. Despite these limitations, the rigorous and detailed methodology and the diversified sample including perspectives of four categories of social actors involved in stay at work contribute to the relevance, richness and validity of the results of this study.

Conclusion

In this study, we identified ten factors that influence the success of stay at work after a period of disability due to an occupational injury. Additionally, the study shed light on the interactions between these factors relating to the worker and her/his environment, demonstrating the complexity of process of stay at work. Then, it is important to consider not only the factors that directly influence stay at work, but also the factors that act upstream. Finally, the results of this study suggest that social exchanges between the actors of the workplaces exert an important influence on the success of the stay at work. Future work is needed to

understand how rehabilitation professionals could have a key role in supporting the development of positive social exchanges for both the worker and the workplace.

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