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RESEARCH PAPER

Factors perceived by employees regarding their sick leave due to depression

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Abstract

Purpose: Depression is a leading factor of work disability throughout the world. However, a paucity of studies investigated factors related to the development of depression in the workplace prior to sick leave. This qualitative study aims to describe the factors related to the onset of depression at work prior to sick leave. *Method*: This study followed a descriptive interpretive design. Interviews were conducted with 22 individuals (15 women) who experienced depression while they were employed within an organization. The verbatim transcripts were coded using QDA-Miner software. *Results*: Participants ($n = 22$) reported that their depression was partially or completely related to their work. From the analysis of all 22 participants' interviews transcripts, three major themes emerged: (1) work-related psychosocial risk factors (e.g. factors related to supervisors' attitudes and behaviors), (2) the individual's experience in employment (e.g. reactions to symptoms) and (3) the period preceding the sick leave of individuals who experienced depression (e.g. communication with the supervisor). *Conclusions*: These results support the importance of preventive intervention oriented toward decreasing psychosocial risks within organizations, and detecting workers at risk. Future studies should focus on factors that might influence individuals in their decision to reveal or not their difficulties to their supervisors.

Keywords

Depression, interviews, mental health, psychosocial risk factors, sick leave, workplace

History

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➤ Implications for Rehabilitation

- The conditions in which employees were working before they started their leave of absence should be identified; notably (1) relationships with organizational stakeholders (e.g. immediate supervisor, colleagues) and (2) psychosocial risk factors (e.g. work overload, over-commitment).
- A good relationship between the immediate supervisor and the employee is an important factor to prevent sick leave due to depression.
- The supervisors should be informed quickly after the first appearance of depressive symptoms in employees in order to implement feasible and appropriate accommodations as soon as possible.

Introduction

According to the World Health Organization (WHO), depression is a leading factor of work disability throughout the world [1]. Many people, specifically, almost half a million Canadian workers between the ages of 25 and 64, struggle with depression [2]. This common mental disorder leads to enormous human and financial costs [3–5]. As well, depressive symptoms are often accompanied by productivity and performance decreases, presenteeism and absenteeism [6–8]. In this regard, a Canadian investigation [9,10] highlighted that organizational constraints (e.g. job strain) and demanding work situations (e.g. emotionally challenging work) are associated with depressive symptoms. Furthermore, evidence suggests that working under adverse conditions (e.g. high job demands) can directly increase the risk of developing mental disorders (e.g. anxiety, depression) [11–13] as well as indirectly increase absenteeism from work due to job strain [14].

An increased risk for depression is, in particular, significantly associated with high psychological demands, low social support, serious conflicts in the workplace, exclusion by the immediate

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supervisor and/or colleagues, low levels of skill discretion, job insecurity, poor leadership and effort-reward imbalance [11,14–18]. Some studies have investigated how work-related psychosocial risk factors are associated with depression [18] and how they may contribute to sick leaves [19]. In order to better understand the relationships between the psychosocial factors involved in the development of depressive symptoms in the workplace, the aforementioned variables must be evaluated within comprehensive theoretical models. To do so, two main theoretical models have been used to explain the relationships between work-related psychosocial risk factors and mental health: (1) the job demand-control (JD-C) model [20] and (2) the effort-reward imbalance (ERI) model [21].

First, the theoretical model of Karasek [20] suggests that work situations characterized by high psychological demands (e.g. time pressure, excessive workload) paired with a low degree of decision-making autonomy (i.e. calculated by a combination of skill discretion and decision authority) increase the risk of developing mental or physical health problems [22]. An additional factor was later introduced by Johnson et al. to Karasek's social support at work model [23]. The social support at work model mainly addresses socio-emotional integration among supervisors and co-workers as well as the level of assistance provided by others when one is performing tasks [24]. Likewise, adequate skill discretion and social support can buffer the impact of job demands on job strain.

Second, Siegrist's ERI theoretical model [21] suggests that work situations characterized by a high degree of effort paired with a low level of recognition entail high risks for physical or emotional pathological reactions. In this model, the effort can result from an external source (e.g. time restrictions, heavy responsibilities) or an internal source (e.g. the amount of energy mobilized for work and the degree of implication of individuals).

The previously mentioned empirical studies and theoretical models are quite relevant for understanding the significant factors related to mental health problems in the workplace. However, they do not include systematic evaluations of the organizational context, most likely due to feasibility and cost issues. Furthermore, with the exception of a few recent studies related to: (1) the expectations and perceptions toward return-to-work of people with common mental disorders [25–27] and (2) employees experiencing burnout after being exposed to cutbacks in their workplace [28], only a paucity of studies investigated factors related to the development of depression in the workplace prior to sick leave [29]. Consequently, the main goal of this study is to better understand the factors that can trigger depression and depressive symptoms in the workplace; with specific attention given to refining our theoretical understanding of this thematic and our ability to intervene earlier (i.e. before the work absence). More specifically, this qualitative study aims to describe the factors related to the onset of depression at work prior to the employee's sick leave. To this end, this study will analyze the major themes and the specific factors that emerge from interviews with people who experienced depression.

Methods

Design

Interviews were conducted with individuals who experienced depression while they were employed within an organization. The interview guide used in this study has been elaborated under a larger study program and was based on narratives of employees [30]. In this context, the guide was designed to cover three significant periods surrounding depression in the workplace: (1) the time preceding the absence from work, (2) the time during the leave of absence and (3) the return-to-work. However, this article focuses exclusively on the time preceding the absence from work. This study followed a descriptive interpretive design [31,32]. On this subject, Gallagher [33] notes that this type of eclectic qualitative research allows one to take into account the investigators' and participants' subjectivities (by adopting a flexible, evolutionary and iterative system) and to identify a phenomenon by defining its components. During the semi-structured interviews, the descriptive and general questions (e.g. *Are there work-related elements that triggered your depression? If yes, which ones?*) were supported by additional probing questions, which were more of an interpretive nature (e.g. *Can you explain why you did not take a particular step or avoided another one?*). An example of these probing questions will follow later in regard to the disclosure of health status to the immediate supervisor.

Participants and recruitment

To ensure the heterogeneity of our pool of individuals, participants were recruited from different sources (e.g. emails were sent to all contacts of a provincial association working in mental health, recruitment posters were submitted to various institutions, contacts were established with the human resources departments of organizations from various activity sectors). The inclusion criteria were: (1) to speak French or English, (2) to have experienced depression while being employed during the last 5 years (i.e. between 2007 and 2012) and (3) to have received a depression diagnosis by a general physician or psychiatrist.

A total of 150 individuals contacted the research coordinator. However, only 28 were pre-selected to take part in the study because they met inclusion criteria. Other potential participants were excluded for one or more of the following reasons: (1) they had a different (bipolar disorder, schizophrenia) or unclear diagnosis, (2) their depression was treated more than 5 years ago, (3) they had not been employed in the last 5 years at the time of the recruitment interview and/or (4) their depression did not appear while they were employed. Individuals who were retired or retiring soon were also excluded. In addition, individuals who presented similar characteristics (e.g. sex, profession, activity sector, region, etc.) to participants already enrolled in the study were also excluded.

A total of 24 individuals participated in the study, ensuring saturation of the collected data while considering various characteristics (e.g. sex, age, activity sector). The last interviews (between 20 and 24) did not bring any new information that could have justified pursuing additional data collection. Most of the interviews ($n = 21$) were conducted in person at the affiliated University of one of the co-investigators. The remaining interviews were conducted by phone for individuals who could not travel to the interview location. All interviews were audio-recorded and subsequently transcribed. The following statement was present in the participant consent form: ''Audio recording of the interviews will be kept in a locked file cabinet, without your name appearing on it. Also, the transcription of the interview will be anonymous''.

The final sample ($n = 22$) consisted of people who experienced depression and for whom their depression was partially ($n = 15$) or completely ($n = 7$) related to their work. In order to analyze the factors associated with work-related depression, we excluded two participants from the analyses because they considered their depression to be related to their personal lives. This study was approved by the ethics committee of the University of Sherbrooke. Participants received financial compensation for their time and the constraints that originated from their participation in this research project.

Data analysis

Investigators' theoretical positions have been clearly indicated in the introduction of this article in order to present significant and credible contribution to the phenomenon under study. This article focuses on the period preceding the absence from work and, more precisely, on the factors that can trigger depression and absence from work due to depression.

The verbatim transcripts were coded using QDA-Miner software. The first three interviews were used to create a book of codes common to raters (M. C. & E. S.). To complete the coding, both investigators relied on the literature presented in the introduction. Coding was influenced by empirical findings and theories related to psychosocial risk factors that the authors use in their respective disciplines [27,34,35]. In accordance with the preliminary book of codes, raters independently categorized the verbatim transcripts of eight interviews and compared their interpretations. The initial inter-rater agreement was 80%. Raters discussed diverging interpretations until the agreement increased to 100%. Diverging results were mainly discussed in order to: (1) refine the theme titles, (2) subordinate certain sub-themes to more central themes and (3) obtain common agreement on the new code titles to properly represent the transcripts. Given the high inter-rater agreement, the subsequent coding was completed by a single rater. When necessary, meetings were held between two raters to agree on new code titles. In order to minimize potential biases, the overall coding was ultimately re-examined by two investigators to ensure that it correctly represented the content of the transcripts. Finally, frequencies were calculated for each component to learn about the salience of each of them for participants in this study.

Results

Participant characteristics

The final sample ($n = 22$) consisted of 15 women and 7 men, two thirds of which held a university degree. Almost half the participants ($n = 10$) were between 31 and 45 years old (6 were more than 45 years old), married or common-law spouses and residing in one of the major urban centers of Quebec (Canada). About two thirds of the sample ($n = 15$) worked 10 years or less within the organization from which they were absent due to depression, while 2 worked more than 20 years. Twelve participants worked in the public sector, while 7 were in the private sector and 3 worked in non-profit organizations. Finally, the interview occurred from 4 to 60 months ($M = 30$) after their sick leave due to depression.

Factors perceived by employees regarding their work absence due to depression

From the analysis of all 22 participants' interview transcripts, three major themes emerged: (1) work-related psychosocial risk factors, (2) the individual's experience in employment and (3) the period preceding the sick leave of individuals who experienced depression. These major themes are described below and supported by Tables 1 and 2.

Work-related psychosocial risk factors

All factors related to work that were described by participants as difficult are presented in Table 1 and classified into seven subthemes: (1) factors related to tasks and functions, (2) organizational factors, (3) factors related to the over-commitment of individuals in their work, (4) factors related to the attitudes and behaviors of supervisors and contact persons, (5) relational factors with key stakeholders of the organization, (6) factors associated with incongruities between individuals and their work environment and (7) other factors.

Factors related to tasks and functions. More than half the participants ($n = 13$) reported that a heavy workload was a difficult element. This burden can be both qualitative and quantitative in nature. Several comments perfectly describe this work overload (qualitative and quantitative) and the feeling of distress that results.

> It got to a point where, at a certain time [...] when I was visiting a person in her/his room at the hospital, that, I was so overwhelmed, I was telling myself, it can't be this morning, that she/he cries or feels hurt, I don't have the time, I have a crazy day ahead of me. (#7)
>
> I... have more work than I can handle. (#18)

Other miscellaneous aspects, still related to tasks, also seemed to be difficult; some participants mentioned: (1) the exposure to others' suffering, (2) being too much in-demand or having an overly sustained work pace, (3) the burden of making or announcing decisions that negatively impact others and (4) major changes in tasks.

> ... some women have been beaten, abused over long periods of time, it is not easy to hear these kind of stories on a daily basis. (#3)
>
> ... my decisions had an impact on most of the accounts that I had, so, a lot of business' closures, a lot of personal or contractors homes' repossessed. It was very ... a very destructive job. (#10).

Organizational factors. We noted the following organizational characteristics: (1) an unhealthy general organizational climate, (2) frequent changes of immediate supervisors and (3) organizations perceived as inadequate, all of which jeopardizes work (Table 1).

> ... there are a lot of changes in executives, who are our supervisors, and in one year, there has been three executive changes. Therefore, three different philosophies. (#1)
>
> ... it is okay to have meetings, but it is not normal to spend all day in meetings, you know. (#17)

Factors related to the over-commitment of individuals in their work. The over-commitment of individuals in their work can come from their own expectations toward themselves, their perfectionist tendencies or from their need for control. We noted that this type of over-commitment often leads individuals to impose overtime on themselves (Table 1).

> It was really stressful for me also because I had high standards. So, I used to arrive early in the morning in order to get prepared... (#13)
>
> For me, it was, let's say, ''normal'' to prove myself, in the workplace, in the beginning of a new career. It was normal to work that much. (#11)

Factors related to the attitudes and behaviors of supervisors and contact persons. More than half the participants ($n = 12$) reported having a difficult time knowing how to interact with their immediate supervisors (this factor can also be applied to

Table 1. Factors perceived by employees regarding their work absence due to depression.

Factors related to tasks and functions	**20[a]**
Heavy workload/overtime	13[b]
Lack of support, assistance, collaboration	7
Exposure to suffering/misery of others/helplessness	5
Being very in-demand/overly sustained work pace	3
Must make/announce decisions which have a (negative) impact on others	3
Major changes in task(s)	3
Lack of time, overly tight deadlines	2
Absence of (or few) concrete results	2
Ambiguous definition of the individual's role in one's work	1
Too much paperwork	1
Boring/unrewarding work, lack of challenges	1
Organization's high standards	1
Solicitation of clients	1
Heavy responsibilities	1
Isolation from colleagues	1
Unstable schedules/work on weekends	1
High cognitive requirements/large amount of information to manage	1
Always being in the spotlight, no time to be alone	1
Must answer to different stakeholders with contradictory needs	1
Significant difficulties met during a specific project	1
Organizational factors	**14**
Unhealthy/inadequate general climate	6
Changes of immediate supervisor	5
The organization is judged as inadequate	4
Organizational changes (changes in direction, internal reorganization, fusions...)	3
Work team changes or changes within work team	2
Unstable work environment (several departures, sickness)	2
Insufficient supervision and/or training	2
Opposition of 2 (or more) cultures within the organization	1
Job cuts/mandatory job transfer	1
Management philosophy is judged as inadequate	1
Lack of resources (human or material)	1
Confined physical space	1
Working with an administrative council: intrusion of members versus direction, absenteeism of members, multiplication of ''bosses''	1
Factors related to the over-commitment of individuals in their work	**12**
Over-commitment of individuals in their work/high expectations of oneself, perfectionism, the need to control the situation...	12
Over-commitment of individuals in their work/self-imposition of overtime	8
Factors related to the attitudes and behaviors of supervisors and contact persons	**12**
Immediate supervisor is perceived as not credible	7
Conflicting/difficult relationships with supervisors	4
Supervisors' unavailability	3
Patronizing supervisors (or contact person)/psychological harassment	3
Supervisors do not listen/provide little support	3
Supervisors give few comments/little feedback	3
Supervisors have an inadequate management philosophy	1
Relational factors with key stakeholders of the organization	**10**
Conflicts/tensions within the team	4
Conflicting/difficult relationships with colleague(s)	4
Conflicting/difficult relationships with employees/subordinates	2
Conflicting/difficult relationships with the union	1
Loss of a significant colleague/mentor	1
Factors associated with incongruities between individuals and their work environment	**7**
Individuals facing conflicts of values, moral dilemmas	4
Individuals do not recognize themselves in their jobs/jobs are not suited to individuals/no sense, no future perspectives	4
Individuals do not recognize themselves in the organization's culture	1
Exaggerated concern for others' opinions/important need for feedback	1
Other factors	**6**
Subjected to complaints, disciplinary notices, negative evaluations	3
Distance of the workplace	1
Living injustice at work	1
Conflict of interest with a contact person (consultant)	1
Full time return from a maternity leave (without progressive return)	1

[a]Number of participants who mentioned at least one factor from the category.
[b]Number of participants who mentioned the factor.

Table 2. Symptoms experienced and behavioral reactions before the leave of absence.

Physical symptoms	**21**[a]
Sleep problems (lack or excess)	15[b]
Exhaustion, fatigue	13
Weight loss	3
Tremors	3
Migraines, headaches	2
Dizziness/balance problems	1
Pain (neck, general...)	1
Loss of appetite	1
Total blockage (inability to move)	1
Impression of congestion	1
Nausea	1
Intestinal problems	1
Emotional or cognitive symptoms	**21**
Tearful	10
Impatience, irritability, aggressiveness, anger	9
Problems with memory/concentration	8
Living with significant stress	7
Distress, helplessness, internal ill-being, sadness	6
Constant concerns, obsessive thoughts about work	6
Feelings of incompetence/inferiority	6
Anxiety/anguish	5
Culpability/shame/severe judgment towards oneself	4
Demotivation, disinterest	4
Feelings of injustice, of treason	4
Feelings of not being here, of being disoriented	3
Feelings of being under pressure	3
Feelings of being incapable of doing the work	3
Panic attacks	2
Dramatization of situations	2
Hesitations, difficulty in making decisions – lack of confidence	2
Feelings of being watched	2
Suicidal thoughts	1
Absence of humor	1
Changing mood	1
Negativism	1
Nervousness	1
Feelings of being hated	1
Behavioral reactions	**9**
Isolation, social withdrawal	7
Thinking about quitting job, taking steps in this direction	3

[a]Number of participants who mentioned at least one factor from the category.
[b]Number of participants who mentioned the factor.

contact persons who have certain authority over individuals). Some participants perceived their immediate supervisors as being not credible and/or maintained conflicted relationships with them.

> ... I have had a new director, [...] it was my perception, but I thought she did not have the communication skills required for her role. (#13)

Some participants also emphasized their immediate supervisors' unavailability, patronizing attitude, lack of listening, support and feedback.

> ... by the way, my boss never respected the meeting schedule. She used to send me an email to postpone it because she had backaches, headaches. (#18)
>
> And the worst was that she was the one [the supervisor] who was constantly diminishing me ... (#14)

Relational factors with key stakeholders of the organization. Some participants ($n = 10$) reported that conflicts/tensions within their team and/or conflicting relationships with colleagues took place before they went on sick leave for depression.

> ... it was my principal colleague who could help me integrate myself into the place, [...] she was already there wishing that I would make the simplest mistake, and after the simplest mistake I made, well then, she would amplify it, and it was becoming a little dramatic. (#4)

Factors associated with incongruities between individuals and their work environment. Certain participants ($n = 7$) also reported incongruities between themselves and their work environment, which was mainly illustrated by conflicting values or by feelings of not belonging.

> ... I was realizing that it wasn't consistent with my values. (#7)
>
> ... as a social worker, with training in psychology, what is hard is to be solely assigned to clerical functions. (#22)

Other factors. Finally, it should be noted that some participants faced complaints, disciplinary notices or negative evaluations, all of which made their lives at work more difficult.

The individual's experience in employment

Difficulties encountered in employment are often paired with personal problems. Such situations can easily undermine participants' mental health, especially those who have already started to show symptoms during the period preceding their sick leave. Accordingly, in addition to difficulties at work, a significant number of participants ($n = 14$) in our study faced personal problems prior to their sick leave (e.g. marital problems, money issues, death/injury of a close family member or friend or particularly demanding situations like relocating). Moreover, some participants also mentioned having physical health problems before their sick leave. Nevertheless, this reality should not bias our understanding of the phenomenon because the participants related their depression to their work, partially or completely. Table 2 lists the symptoms and behavioral reactions reported by participants, classified into three categories: (1) physical, (2) emotional or cognitive and (3) behavioral reactions. These symptoms and behavioral reactions are commonly associated with depression: disturbed sleep, exhaustion, fatigue, irritability, tears, memory or concentration difficulties and social isolation.

Reactions to symptoms. Some participants ($n = 8$) denied their first symptoms or medical diagnosis. However, it should be noted that none of the participants reported any history of prior diagnosed mental health conditions. This denial can have different sources and be expressed in different ways, for example, to overlook the symptoms, to insist on going to work, to be convinced of the impossibility of having depression, to refuse the diagnosis due to pride or because of prejudices regarding this illness.

> I, myself, I believe I had stigmatizing views regarding mental illness. So, I told myself, it's not true, it's not happening to me. (#17)

Furthermore, we noticed that some participants ($n = 6$) felt confused about the relationship between their physical symptoms and their more general psychological ill-being. Moreover, it should be noted that two participants first went on sick leave for

physical reasons, and received a depression diagnosis only later during their absence.

> Me, I was convinced that it was my heart again. (#19)
> ... I was being treated for the neck, because ''supposedly'' it was the neck. But it was not quite that. (#1)

As for denial reactions, the confusion between physical and psychological symptoms vanished with time and thus allowed individuals to identify the true nature of their symptoms: depression.

> It was when I saw him [my doctor], 6 weeks later, [...] [the physical symptoms], that I had reported, had diminished a lot, but then, it was more like sadness that was there ... not wanting to do anything, being passive, finally, then, it was more something like that, that was present. (#6)

Denial and confusion aside, we also observed that some participants ($n = 5$) camouflaged their depression in front of their colleagues or close relatives and friends.

> But I did not want my children to be aware of it. I had backaches. It was the watchword. (#2)
> ... It was important for me to hide it ... (#13)

The period preceding the sick leave

The duration of symptoms experienced by participants before their sick leave was variable (from 1 to 24 months). More than half the participants ($n = 12$) were immediately sent on sick leave by their general physician following their first consultation. We observed a net distinction in sick leaves between genders: all men ($n = 7$) but only one-third of women (5/15) started their sick leave following their first consultation; the remaining women had previously consulted for their symptoms when they were sent on sick leave. Moreover, most participants ($n = 16$) informed their supervisor about their condition at the moment of their sick leave. When asked about why they did not inform their supervisor before their leave, some mentioned: the fear of losing their job, anticipated negative consequences, pride, having a certain image to keep.

> I would have lost my job immediately (#10)
> ... I couldn't see myself going there: ''... my god, my life is terrible ...'' I really wanted to keep my image of being a strong girl. (#8)

The participants who had never talked about their condition before their sick leave also reported that their supervisors were untrustworthy and not generally open.

> I had no trust in her. No trust, no trust, no trust. I was not able at all to talk about it. (#14)

Discussion

This study aims to describe factors related to the onset of depression at work, appearing prior to sick leave. It is important to mention that all participants of the study ($n = 22$) reported that their depression was *related to their work* or *related to their work and personal lives* (i.e. a combination of both elements). These results corroborate those of St-Arnaud et al. [36], who found that more than 90% of workers absent from work due to a mental health problem gave full or partial work-related reasons to explain the worsening of their health status and their sick leave. Similarly, 61% of workers who participated in *Quebec's Investigation on Work, Employment and Health Conditions* considered their depressive symptoms to be partially or completely related to their principal job [10]. Accordingly, these results support the need to better understand the work-related factors that can lead to a leave of absence due to depression. The results of content analyses, using a descriptive interpretive design [33], revealed three major themes: work-related psychosocial risk factors, the individual's experience in employment and the period preceding the sick leave. Over the last few years, the models of Karasek [20] and Siegrist [21] have been studied by numerous teams around the world and the results clearly provide evidence for the pathological effect of harmful work conditions on workers' mental health [10,37,38]. For example, several studies in the literature mentioned the damaging consequences of a heavy workload on workers' mental health [11,12,18,20,39]. Moreover, the basic assumption of the JD-C [20] model is that psychosocial risk factors (i.e. high job demands) can lead to job strain when resources are lacking (i.e. low decision latitude, low social support).

In terms of organizational factors, the results of the present qualitative study highlight the links between certain elements of work context, for example an unhealthy organizational climate or inadequate organization (e.g. disorganization of work following several executive changes), and the emergence of depressive symptoms. Furthermore, there is evidence that in organizational environments where employees have low satisfaction rates about their psychosocial climate, there is an increased risk of mental health problems for workers [40].

In terms of psychosocial risk factors related to individuals, over-commitment at work, which was observed for half our participants, is also a known phenomenon in the literature. The over-commitment, as observed in this study, refers to a high quantity of energy mobilized or to a high degree of implication in work. According to Siegrist [21], this type of behavior: (1) can translate a strong need for control in one's work, (2) can be motivated by the desire to be recognized/approved or by a strong competitive spirit or (3) can be related to difficulties in distancing oneself from work.

Among the psychosocial factors linked to interpersonal relationships in the workplace, as highlighted in this study, the immediate supervisor's attitudes or behaviors can play a negative role on workers' mental health. Thus, a lack of support from the supervisor [12,18,35,39], and a situation of relational injustice (i.e. a lack of consideration from the supervisor from the employee's point of view, unfair or inequitable treatment) are often associated with failing health for employees, due to depression or to stress-related disorders.

The results of this study also allowed us to better understand participants' experience in employment, before their leave of absence. Many symptoms reported by our participants (depressive mood, general disinterest, sleep problems and fatigue or lack of energy) are DSM-5 [41] criteria used to diagnose a Major Depressive Disorder. However, our results show that sometimes there is confusion between physical and psychological symptoms. A noteworthy observation was that some participants had first consulted for physical symptoms prior to the depression diagnosis or to these physical symptoms' disappearance. Simon et al. [42] report this confusion either as: (1) a form of somatization, where individuals consult a general physician only for physical reasons when, in fact, they have psychological problems, or (2) a denial of psychological distress, where the latter is substituted by physical symptoms. In this case, the somatization would be a psychological defense mechanism against the awareness or the expression of psychological distress. These two forms of somatization, which

can overlap, refer to conscious or unconscious behaviors and were observed for the participants of our study.

Furthermore, the phenomenon surrounding denial of depressive symptoms or diagnosis, as observed in this study, is well documented in a clinical literature review published by Goldman et al. [43]. These authors stipulate that some individuals: (1) deny or minimize their clinical symptoms, (2) rationalize them by treating them as predictable consequences of life stress or other medical problems, (3) think they can resolve the symptoms by themselves or (4) just do not see them as medical problems. Consequently, these individuals are not ready to accept the diagnosis or the treatment for depression. In accordance with our results, Goldman et al. [43] consider that many of these reactions are caused by the social stigma surrounding mental disorders, in this case depression. In our study, it is interesting to note that men generally consulted later than women. Actually, men consulted *in extremis* because their first consultation led to an immediate leave of absence. Most women had already consulted several times before beginning their sick leave. Despite the small number of men in our sample, these results support other studies in which men consult less than woman for mental health problems [44,45]. This resistance to consultation (and to help seeking in general) in men has been mentioned/studied by various authors [46–49]. For example, O'Brien et al. [47], in a qualitative study including 15 discussion groups with men of various profiles, mentioned that consulting for psychological symptoms is perceived as damaging to their masculinity. In a literature review on the subject, Möeller-Leimkühler [45] highlights that for men, seeking help for emotional distress implies: (1) a loss of status, control and autonomy, (2) a feeling of incompetence, of dependence and (3) an offence to one's identity. Other workers reported feeling guilty about missing work, as if their health's deterioration was a sign of weakness and carelessness, despite the presence of a particularly incapacitating health problem [27]. This reality is especially concerning given that several industrialized countries have suicide rates three to four times higher for men compared to women. This is notably the case for Canada, United-States, United-Kingdom, Germany and Australia [1].

Another important finding of this study, in relation to the time preceding the leave of absence, is the fact that most participants had first informed their immediate supervisor of their state right at the time of their sick leave. This situation is worrisome because in such circumstances, it is impossible for supervisors to adequately plan and implement preventive actions (e.g. work adjustment for the individual in need or even for the team) to obviate the leave of absence [50]. To explain why they did not inform their supervisors earlier, participants reported reasons of the following categories: (1) fear of losing one's job, (2) anticipated negative consequences [51] and (3) perception of a lack of openness/trust from the supervisor. These results are highlighted in a qualitative study of Sallis and Birkin [29] entitled *The lack of line manager support*, which recalls the previously mentioned theme about the complex relationships that participants can have with their supervisors.

One last finding of this study is related to image preservation, which is also indirectly related to the social stigma surrounding mental health problems, in general. Several authors have highlighted the importance of workplace awareness campaigns for depression and other mental conditions aiming to: (1) fight the social stigma associated with mental health and (2) facilitate the disclosure of one's health status, particularly one's functional limitations [35,52]. The disclosure of one's health status (in this case depression) in the workplace must not be considered as binary (to tell or not to tell). To this extent, we suggested that individuals follow a plan of personal information management, supported by a stakeholder specializing in return-to-work. This plan would control what information will be provided, how it will be provided, who will disclose the information and who will receive the information to avoid eventual stigmatizing or discriminatory behaviors in the workplace [53]. We note that this study has limitations. First, the sample size was relatively small, especially the number of men. However, our ratio of two women for one man corresponds to the sex ratio reported in studies of depression prevalence from most of the industrialized countries [45]. Moreover, this study respects the saturation of information given during the individual interviews. Also, this study measured neither the presence nor the real intensity of the difficult factors linked to employment (e.g. work overload, unhealthy organizational climate); these were reported uniquely according to participants' perceptions. The results of this study showed a link between negative psychosocial climate (as evaluated by all employees) and higher prevalence rates of mental health problems within the organization. Finally, this study can present a recall bias since the interview occurred on average 30 months after the onset of the depression. This study also has strengths such as a high level of inter-rater agreement, highlighted by the verbatim transcript corresponding to the specific participant.

The clinical implications of this study are that it supports the importance of preventing mental health problems, especially depression, in organizations. To that end, Vézina and St-Arnaud [9] presented elements that guarantee the success of preventive intervention projects aiming to minimize an organization's psychosocial constraints and they have suggested a grid analysis of psychosocial risks in the workplace. This grid notably takes into account indicators of workload and social support from supervisors. Another aspect of prevention is the detection of individuals showing early symptoms [34,35]. If employees consult earlier, they will experience less deterioration of their health and a shorter absence from work. Finally, the fight against mental health stigmatization in the workplace is also an important element that could promote openness toward depression and allow one to establish work adjustments sooner and before the deterioration of individuals' states.

Conclusion

To better understand the factors that lead a person to take sick leave, this study aimed to describe the experience of individuals who had depression from the time they were still in employment until their sick leave. Our results showed that a heavy workload, certain organizational factors (e.g. an unhealthy organizational climate), the over-commitment of individuals in their work and the attitudes of immediate supervisors are all work-related psychosocial risk factors contributing to the appearance of depressive symptoms, which lead to depression and sick leave. These results also shed light on reactions of denial and confusion with physical symptoms. Finally, we have observed that the lack of prevention of depressive symptoms can often lead to consequences for both the individual and the immediate supervisor.

These results support the importance of implementing preventive intervention strategies oriented toward decreasing psychosocial risks within organizations, as well as detection strategies for individuals at risk of presenting difficulties. Future studies should focus on factors that might influence individuals in their decision to reveal or not reveal their difficulties to their supervisors. Future studies should also focus on how to judiciously proceed (e.g. plan of personal information management) so that supervisors are informed quickly after the first appearance of symptoms and can establish accommodations as soon as possible. The reduction of stigma related to depression could lead individuals to reveal their difficulties to their supervisors earlier, consult health professionals sooner and

eventually diminish the reactions of denial related to symptoms or diagnosis. In the long run, all of these interventions could improve the health and well-being of employees in the workplace and reduce the absenteeism rate (in terms of workforce and duration of sickness absence) related to depression.

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References

1. World Health Organization. Mental Health Action Plan:2013–2020. Geneva: WHO; 2013.
2. Gilmour H, Patten SB. La dépression au travail. Perspective – Statistique Canada 2005;Novembre(n°75-001-XIF au catalogue): 20–33.
3. Dewa C, McDaid D, Sultan-Taïeb H. Aspects épidémiologiques et économiques inhérents aux troubles mentaux. In: Corbière M, Durand MJ, eds. Du trouble mental à l'incapacité au travail: Une perspective transdisciplinaire qui vise à mieux saisir cette problématique et à offrir des pistes d'intervention. Montréal: Presses de l'Université du Québec; 2011:15–40.
4. Greenberg PE, Kessler RC, Birnbaum HG, et al. The economic burden of depression in the United States: how did it change between 1990 and 2000? J Clin Psychiatry 2003;64:1465–75.
5. Stephens T, Joubert N. The economic burden of mental health problems in Canada. Chronic Dis Can 2001;22:18–23.
6. Hees HL, Koeter MW, Schene AH. Longitudinal relationship between depressive symptoms and work outcomes in clinically treated patient with long-term sickness absence related to major depressive disorder. J Affect Disord 2013;148:272–7.
7. Lerner D, Mosher Henke R. What does research tell us about depression, job performance, and work productivity? J Occup Environ Med 2008;50:401–10.
8. Lerner D, Adler DA, Rogers WH, et al. Work performance of employees with depression: the impact of work stressors. Am J Health Promot 2010;24:205–13.
9. Vézina M, St-Arnaud L. Interventions pour prévenir les problèmes de santé mentale liés au travail. In: Corbière M, Durand M-J, eds. Du trouble mental à l'incapacité au travail. Québec: Presses de l'Université du Québec; 2011:177–95.
10. Vézina M, St-Arnaud L, Stock S, et al. Chapitre 9: Santé mentale dans Enquête québécoise sur des conditions de travail, d'emploi, de santé et de sécurité du travail 2007–2008 (EQCOTESST) Rapport R-691. Montreal: Institut de la statistique du Québec, Institut national de santé publique du Québec et Institut de recherche Robert-Sauvé en santé et sécurité du travail; 2011:591–645.
11. Bonde JP. Psychosocial factors at work and risk of depression: a systematic review of the epidemiological evidence. Occup Environ Med 2008;65:438–45.
12. Nieuwenhuijsen K, Bruinvels D, Frings-Dresen M. Psychosocial work environment and stress-related disorders, a systematic review. Occup Med 2010;60:277–86.
13. Stansfeld S, Candy B. Psychosocial work environment and mental health – a meta-analytic review. Scand J Work Environ Health 2006; 32:443–62.
14. Virtanen M, Honkonen T, Kivimaki M, et al. Work stress, mental health and antidepressant medication findings from the Health 2000 Study. J Affect Disord 2007;98:189–97.
15. Blackmore ER, Stansfeld SA, Weller I, et al. Major depressive episodes and work stress: results from a national population survey. Am J Public Health 2007;97:2088–93.
16. Kivimaki M, Vahtera J, Elovainio M, et al. Effort-reward imbalance, procedural injustice and relational injustice as psychosocial predictors of health: complementary or redundant models? Occup Environ Med 2007;64:659–65.
17. Ylipaavalniemi J, Kivimaki M, Elovainio M, et al. Psychosocial work characteristics and incidence of newly diagnosed depression: a prospective cohort study of three different models. Soc Sci Med 2005;61:111–22.
18. Netterstrøm B, Conrad N, Bech P, et al. The relation between work-related psychosocial factors and the development of depression. Epidemiol Rev 2008;30:118–32.
19. Munir F, Burr H, Hansen JV, et al. Do positive psychosocial work factors protect against 2-year incidence of long-term sickness absence among employees with and those without depressive symptoms? A prospective study. J Psychosom Res 2011;70:3–9.
20. Karasek R. Job demands, job decision latitude, and mental strain: implications for job redesign. Admin Sci Q 1979;24:285–308.
21. Siegrist J. Adverse health effects of high-effort/low-reward conditions. J Occup Health Psychol 1996;1:27–41.
22. Karasek R. Demand/control model: a social, emotional and physiological approach to stress risk and active behaviour. In: Stellman JM, ed. Theories of job stress. Geneva: International Labor Organization; 2011. Available from: http://www.ilo.org/iloenc/part-v/psychosocial-and-organizational-factors/theories-of-job-stress/item/12-psychosocial-factors-stress-and-health [last accessed 9 May 2015].
23. Johnson JV, Hall EM, Theorell T. Combined effects of job strain and social isolation on cardiovascular disease morbidity and mortality in a random sample of the Swedish male working population. Scand J Work Environ Health 1989;15:271–9.
24. Karasek R, Theorell T. Healthy work: stress, productivity, and the reconstruction of working life. New York: Basic Books; 1992:381.
25. Løvvik C, Øverland S, Hysing M, et al. Association between illness perceptions and return-to-work expectations in workers with common mental health symptoms. J Occup Rehabil 2013;24: 160–70.
26. Nieuwenhuijsen K, Noordik E, van Dijk FJ, van der Klink JJ. Return to work perceptions and actual return to work in workers with common mental disorders. J Occup Rehabil 2013;23: 290–9.
27. St-Arnaud L, Briand C, Corbière M, et al. Supporting a return to work after an absence for a mental health problem: design, implementation, and evaluation of an integrated practices program. Studies and Research Projects/Report R-823. Montreal: Institut de recherche Robert-Sauvé en santé et en sécurité du travail; 2014:114.
28. Eriksson UB, Starrin B, Janson S. Long-term sickness absence due to burnout: absentees' experiences. Qual Health Res 2008;18: 620–32.
29. Sallis A, Birkin R. Experiences of work and sickness absence in employees with depression: an interpretative phenomenological analysis. J Occup Rehabil 2014;24:469–83.
30. Corbière M, St-Arnaud L, Durand M-J, et al. L'étude des facteurs influençant le retour au travail des personnes avec des troubles mentaux. Université de Sherbrooke: Canadian Institute of Health Research; 2009.
31. Sandelowski M. ''Foreword''. In: Thorne SE, ed. Interpretive description. Walnut Creek: Left Coast Press; 2008:11–14.
32. Thorne S, Kirkham S, O'Flynn-Magee K. The analytic challenge in interpretive description. Int J Qual Methods 2004;3:1–21.
33. Gallagher F. La recherche descriptive interprétative: description des besoins psychosociaux de femmes à la suite d'un résultat anormal à la mammographie de dépistage du cancer du sein. In: Corbière M, Larivière N, eds. Méthodes qualitatives, quantitatives et mixtes dans la recherche en sciences humaines, sociales et de la santé. Québec: Presses de l'Université du Québec; 2014:5–28.
34. Corbière M, Negrini A, Dewa CS. Mental health problems and mental disorders: Linked determinants to work participation and work functionning. In: Loisel P, Anema JR, eds. Handbook of work disability: prevention and management. New York: Springer Science+Business Media; 2013:267–88.
35. Durand MJ, Corbière M, Coutu MF, et al. A review of best work-absence management and return-to-work practices for workers with musculoskeletal or common mental disorders. Work 2014;48: 579–89.
36. St-Arnaud L, Bourbonnais R, St-Jean M, Rhéaume J. Determinants of return-to-work among employees absent due to mental health problems. Ind Relat 2007;62:690–713.
37. Vézina M, Bourbonnais R, Brisson C, Trudel L. Workplace prevention and promotion strategies. Healthc Papers 2004;5:32–44.
38. Burton J. WHO healthy workplace framework and model: background and supporting literature and practice. Geneva: World Health Organization; 2010:131.

39. Stanley N, Manthorpe J, White M. Depression in the profession: social workers' experiences and perceptions. Br J Soc Work 2007; 37:281–98.
40. Jensen HK, Wieclaw J, Munch-Hansen T, et al. Does dissatisfaction with psychosocial work climate predict depressive, anxiety and substance abuse disorders? A prospective study of Danish public service employees. J Epidemiol Commun Health 2010;64:796–801.
41. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed. Arlington (VA): American Psychiatric Publishing; 2013.
42. Simon GE, VonKorff M, Piccinelli M, et al. An international study of the relation between somatic symptoms and depression. N Engl J Med 1999;341:1329–35.
43. Goldman LS, Nielsen NH, Hunter CC. Awareness, diagnosis, and treatment of depression. J Gen Intern Med 1999;14:569–80.
44. Lefebvre J, Lesage A, Cyr M, et al. Factors related to utilization of services for mental health reasons in Montreal, Canada. Soc Psychiatry Psychiatr Epidemiol 1998;33:291–8.
45. Möller-Leimkühler AM. Barriers to help-seeking by men: a review of sociocultural and clinical literature with particular reference to depression. J Affect Disord 2002;71:1–9.
46. Haslam C, Atkinson S, Brown S, Haslam R. Perceptions of the impact of depression and anxiety and the medication for these conditions on safety in the workplace. Occup Environ Med 2005;62: 538–45.
47. O'Brien R, Hunt K, Hart G. ''It's caveman stuff, but that is to a certain extent how guys still operate'': men's account of masculinity and help seeking. Soc Sci Med 2005;61:503–16.
48. St-Arnaud L, Corbière M. Déterminants de l'intégration en emploi et retour au travail en santé mentale. In: Corbière M, Durand M-J, eds. Du trouble mental à l'incapacité au travail. Québec: Presses de l'Université du Québec; 2011:109–28.
49. St-Arnaud L, Saint-Jean M, Damasse J. Towards an enhanced understanding of factors involved in the return-to-work process of employees absent due to mental health problems. Can J Commun Mental Health 2006;25:303–15.
50. Lemieux P, Corbière M, Durand MJ. Retour et réintégration au travail de personnes avec un trouble mental: le rôle du supérieur immmédiat. In: Corbière M, Durand MJ, eds. Du trouble mental à l'incapacité au travail: Une perspective transdisciplinaire qui vise à mieux saisir cette problématique et à offrir des pistes d'intervention. Montréal: Presses de l'Université du Québec; 2011:315–38.
51. Lexis MAS, Jansen NWH, Stevens FCJ, van Amelsvoort LGP. Experience of health complaints and help seeking behavior in employees screened for depressive complaints and risk of future sickness absence. J Occup Rehabil 2010;20:537–46.
52. Couser GP. Challenges and opportunities for preventing depression in the workplace: a review of the evidence supporting workplace factors and interventions. J Occup Environ Med 2008;50:411–27.
53. Corbière M, Villotti P, Toth K, Waghorn G. La divulgation du trouble mental et les mesures d'accommodement: deux notions pour comprendre le maintien en emploi de personnes aux prises avec un trouble mental grave [Disclosure of a mental disorder in the workplace and work accomodations: Two factors associated with job tenure of people with severe mental disorders]. L'Encéphale 2014; 40:S91–102.