

Stuck in a job: being “locked-in” or at risk of becoming locked-in at the workplace and well-being over time

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ABSTRACT

In this study, being “locked-in” at the workplace is conceptualized as being in a non-preferred workplace while at the same time perceiving low employability. The aim of the study was to investigate how being locked-in or at risk of becoming locked-in (being in a non-preferred workplace yet currently satisfied, combined with perceiving low employability) relates to well-being (subjective health and depressive symptoms). The hypotheses were tested in a Swedish longitudinal sample (T1 in 2010 and T2 in 2012) of permanent employees ($N = 3491$). The results showed that stability with regard to locked-in-related status (being non-locked-in, at risk of becoming locked-in, or locked-in at both T1 and T2) was related to significant and stable differences in well-being. The non-locked-in status was associated with better well-being than being at risk of becoming locked-in. Moreover, those at risk of becoming locked-in showed better well-being than those with stable locked-in status. Changes towards non-locked-in were accompanied by significant improvements in well-being, and changes towards locked-in were associated with impairments in well-being. The relationships that were found could not be attributed to differences in demographic variables and occupational preference. The findings indicate that being locked-in is detrimental to well-being. This has implications for preventative interventions.

ARTICLE HISTORY

Received 2 April 2015
Accepted 3 November 2015

KEYWORDS

Locked-in; involuntary non-mobility; employability; non-preferred workplace; well-being; career change

Introduction

Over the course of a typical employment career a number of decisions are made concerning job roles, job tasks, and overall employment mobility. Whether or not to apply for a new position or to make a particular job transition are examples of such choices. Voluntary job transitions often lead to benefits such as salary raises, new responsibilities, and job challenges in addition to increased status and self-esteem (Ng, Sorensen, Eby, & Feldman, 2007). However, employees occasionally decide to stay in their current jobs despite the availability of other, seemingly suitable and attractive jobs in the labour market

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(Feldman & Ng, 2007). Besides the most obvious reason for remaining in a job – because individuals are satisfied with their current work arrangements – other reasons addressed in previous research concern the fit between work and private life as well as social relations with co-workers (Mitchell, Holtom, Lee, Sablinski, & Erez, 2001). These other reasons suggest that the broader work-related context, including factors that are more indirectly connected to the job, rather than work tasks themselves, could be an important reason for voluntarily remaining in a job or contract.

However, in a tougher labour market where unemployment rates and the share of temporary contracts are rather high (OECD, 2014), a growing number of individuals can be expected to have few if any job alternatives to choose from. Consequently, more employees, and in particular those in permanent employment, may stay with their present employer even when their job preferences and career plans change. To remain in a job one does not prefer, despite wanting to change company or workplace, can be referred to as *involuntary non-mobility*. Being in such a position may take its toll on a person, since dissatisfaction with one's current job, particularly in combination with perceiving that other job opportunities are lacking, is likely to cause strain and lead to impaired well-being. To date, however, the majority of research has examined job transition with regard to how it reflects career choices (Feldman & Ng, 2012), whereas involuntary non-mobility and its potential consequences for individuals' well-being have largely been overlooked. An exception to this are the studies conducted at the turn of the millennium by Aronsson, Dallner, and Gustafsson (2000) and Aronsson and Göransson (1999). These studies showed that people in non-preferred jobs reported poor psychological well-being. However, both studies were cross-sectional and the conceptualization of involuntary non-mobility in these somewhat early studies has been criticized for only capturing perceptions regarding preference for the current workplace without including perceptions of chances for job transfer (Furåker, 2010; Furåker, Nergaard, & Saloniemi, 2014).

Therefore, in order to investigate the effects of involuntary non-mobility on well-being over time, (a) longitudinal studies and (b) more rigorous concept developments are needed. In the present study, the phenomenon of involuntary non-mobility is referred to as being "locked-in" (Aronsson et al., 2000; Aronsson & Göransson, 1999), but the previous conceptualization, which only captured workplace non-preference, is developed further. Our theoretical and empirical conceptualization of being locked-in comprises *both* individuals' workplace preference *and* their perceptions of their chances of acquiring a new job, that is, their perceived employability. The aim of the present study is to examine how being locked-in relates to well-being over time. More specifically, by studying how changes in locked-in-related status relates to alterations in well-being, this two-wave longitudinal study investigates the consequences that involuntary non-transitions of jobs may have for individuals' well-being in terms of self-reported health and depressive symptoms.

Conceptualization of being locked-in: non-preference towards workplace

Continuing in an ongoing work arrangement despite wanting to change jobs has been previously considered with respect to the workplace, the profession, and both of these combined (Aronsson et al., 2000; Aronsson & Göransson, 1999). Despite obvious similarities between these aspects, they presumably differ with respect to their relation to what resources and efforts are needed for mobilization. For instance, in order to cross occupational boundaries,

an individual often has to invest a considerable amount of time and money in new professional training (Blau, 2007; Ng & Feldman, 2007). In contrast, those who are in a non-preferred workplace need to have an opportunity to acquire another, similar job in order to move on. In this respect, active job seeking (Wanberg, Hough, & Song, 2002), competency development (Berntson, Sverke, & Marklund, 2006), and networking (Fugate, Kinicki, & Ashforth, 2004; McArdle, Waters, Briscoe, & Hall, 2007) may increase the chances of finding other employment in the same occupational field.

Thus, overcoming a situation of being in a non-preferred workplace requires being or becoming attractive to the section of the labour market tied to one's occupational field, whereas resolving a situation of non-preferred occupation often requires a complete career re-orientation. The present study focuses on the group of employees who feel their workplace (rather than their occupation or profession) is not their preferred one for the future, and for whom employability seems to determine whether or not they are locked-in.

Conceptualization of being locked-in: including perceived employability

Individuals' perceptions of their chances of acquiring new employment in the labour market, referred to as *perceived employability*, has been studied frequently in the last decade since employability has been viewed as important for successfully manoeuvring in the continuing competitive labour market (De Cuyper, Bernhard-Oettel, Berntson, De Witte, & Alarco, 2008; Fugate et al., 2004). Besides situational factors, such as the health of regional and global labour markets (van Ham, Mulder, & Hooimeijer, 2001), individual factors, such as educational level and competency development, have been found to affect perceived employability (Berntson et al., 2006).

We argue, in accordance with other researchers (Furåker, 2010; Furåker et al., 2014), that perceived employability is a central aspect to the locked-in phenomenon, as it affects individuals' sense of their ability to change their job situation should they wish to. In the present study, employability reflects a person's employment opportunities in the local labour market with respect to jobs similar to his or her current job. The reasoning behind this geographical delimitation is that relocation (beyond a reasonable commuting distance) is not considered feasible in many cases, for example, due to being in a dual-income situation or caregiving commitments to older relatives (Furåker et al., 2014). In line with this reasoning, Furåker et al. (2014) showed, in a Nordic sample, that the lack of available jobs in the local labour market within commuting distance was reported as a major hindrance to obtaining a comparable job. Further, employability in the present study relates to similar jobs, rather than better jobs, since the main focus is not on hierarchical career development and opportunities for promotion.

Two conditions therefore need to be fulfilled to be considered locked-in at the workplace: the individual (1) is at a non-preferred workplace and (2) perceives low employability, that is, few opportunities to find an equivalent job elsewhere. Furthermore, even though temporary workers in some circumstances also might be considered locked-in, it may be questioned whether their situation really resembles the locked-in phenomenon, since their situation may change whenever their contract ends (Furåker, 2010). Therefore only employees with permanent contracts are included in the present study.

Being locked-in – a matter of low control and a potential resource loss

To understand the implications of being locked-in at the workplace, control-related theories are useful. Within the research field of work and health, Karasek and Theorell's (1990) Job Demand-Control model has been very influential during the last decades. However, this model first and foremost deals with control *within* the work environment, such as control over how to accomplish one's work tasks. To explain the lack of control that is inherent in being locked-in, that is, control over one's work situation at a more general level (Aronsson, 1989; Aronsson & Göransson, 1999), a better-suited theory is *control theory* (Carver & Scheier, 1982), which has been further developed to apply to employees' well-being in an organizational context (Warr, 2006).

According to control theory, individuals constantly compare their current state in some specific aspect of life to a desirable reference state and try to self-regulate by adjusting their behaviour to decrease any discrepancy. However, if the outcome-expectancy of adjusting one's behaviour is low, the individual most likely will withdraw or disengage from any further attempts to reduce the gap (Carver & Scheier, 1982). As a consequence of perceiving few opportunities to transfer to a desirable job, locked-in individuals lack control over reducing the inconsistency between their current non-preferred workplaces and obtaining a more preferred workplace (i.e. achieving their reference state). This is in line with a wealth of recent research suggesting that perceiving a high level of employability helps improve the control individuals have over their career and over choosing job assignments that fit their preferences (De Cuyper, Mäkikangas, Kinnunen, Mauno, & Witte, 2012; Forrier, Sels, & Stynen, 2009).

In addition, transfer-related activities such as job seeking, recruitment processes, and the job transfer itself take a lot of time and effort (Wanberg, Basbug, Van Hooft, & Samtani, 2012). According to the conservation of resources (COR) theory (Hobfoll, 1989), individuals are motivated to invest their resources (e.g. time, physical, and emotional energy) if that is believed to lead to further resource gains (e.g. a better job offer that brings financial benefits, competency development, or other valued resources). If they do not believe that their efforts will lead to an increase in resources, individuals will likely focus on protecting their current resources from depletion, since a loss of resources, or even the prospect of future losses, is associated with stress and low well-being (Hobfoll, 1989). Thus, one might expect that individuals who are locked-in at their workplace, in order to protect against and minimize the possibility of resource losses such as job and income loss, would not engage in job searching and instead devote their energy to their current job.

However, remaining in a non-preferred job over a longer period may in itself bring about resource depletion in the form of energy depletion from having to cope with an unfulfilling job (Aronsson et al., 2000). This could also lead to additional losses in resources, as locked-in employees who eventually show less interest in their work or development may receive less social support from managers and fewer or no opportunities for competency development at work (Aronsson et al., 2000; Aronsson & Göransson, 1999). Their perceived employability, an important individual resource (De Cuyper et al., 2012), could decrease even further as a result. Moreover, energy depletion may continue and over time lead to a typical resource loss spiral (Hobfoll, Johnson, Ennis, & Jackson, 2003).

The relationship between being locked-in and subsequent well-being

Based on control theory (Carver & Scheier, 1982) and COR theory (Hobfoll, 1989), a relationship between being locked-in and subsequent well-being is expected to exist. Accordingly, perceiving a low level of control (due to perceived low employability), while experiencing an ongoing process of resource depletion (connected to the energy required to continue working in a non-preferred job), would lead to impaired well-being over time. Empirical evidence from employability research and studies on workplace non-preferences and well-being provide some possible support for this linkage. For example, fatigue, listlessness, headaches, and slight depression have been found to be associated with being in a non-preferred workplace and/or occupation (Aronsson et al., 2000; Aronsson & Göransson, 1999; Furåker, 2010). Being in a non-preferred workplace and a non-preferred occupation has also been found to relate to lower job satisfaction (Muhonen, 2010) as well as to lower job engagement and increased intention to leave the job (Bernhard-Oettel, De Cuyper, Berntson, & Isaksson, 2008). In addition, perceived employability has been found to relate to health and well-being (Berntson & Marklund, 2007; De Cuyper et al., 2012; Kirves, Kinnunen, De Cuyper, & Makikangas, 2014). In a few small cross-sectional studies (Fahlén et al., 2009; Furåker, 2010), a combination of low employability and being in a non-preferred workplace was found to be associated with long-term absence (Fahlén et al., 2009) and health problems (Furåker, 2010). Taken together, these findings suggest that a combination of being in a non-preferred workplace and perceiving low employability, that is, being locked-in, would have a negative impact on well-being if the locked-in situation continues over time.

Thus, the theoretical framework together with the empirical findings presented above suggest that being locked-in is related to impaired psychological well-being and health. The present study therefore focuses on well-being in the form of (1) an individual's perception of his/her general health, which is pertinent since it has been found to be strongly associated with morbidity and mortality (Bailis, Segall, & Chipperfield, 2003; Lundberg & Manderbacka, 1996), and (2) depressive symptoms, which are very common in today's working life and often reasons for work disability and therefore worth studying (Wittchen et al., 2011). Thus we formulate the first hypothesis:

Hypothesis 1: Over time, individuals who are locked-in (at both time points) will report lower well-being than non-locked-in individuals.

However, the perceptions underlying being locked-in do not have to be stable. They may change over time if the external circumstances change or if employees' perceptions of the workplace or of their employability change. A change in status from non-locked-in to locked-in creates (or enlarges) a discrepancy between the current and reference states, as explained in control theory (Carver & Scheier, 1982). Becoming locked-in may also mean losing resources, which may cause strain and decreased well-being (Hobfoll, 1989). Some support has been found for this argument, as one study indicated that employees who changed from positions they preferred to new positions they did not prefer reported lower subsequent psychological well-being (Bernhard-Oettel et al., 2013). In a similar vein, it has been found in previous research that laid-off workers who took on new employment with a lower status reported lower psychological well-

being (Feldman, Leana, & Bolino, 2002), indicating that the transition to a less preferred job has negative effects. We therefore hypothesize that:

Hypothesis 2: Changing status from non-locked-in to locked-in will lead to impaired well-being.

Another scenario concerns individuals who go from being locked-in to being non-locked-in over time. With this shift, control could be expected to increase as the discrepancy between their current and reference states diminishes or disappears (Carver & Scheier, 1982). Moreover, strain levels should decrease since the resource depletion process ceases (Hobfoll, 1989). The reason behind such a positive transition might be that the individual has made a job transition (Ng, Eby, Sorensen, & Feldman, 2005) or increased his or her employability, for example, through competency training or further education (Hillage & Pollard, 1998). Alternatively, such a change may occur when circumstances related to the job are altered (Bernhard-Oettel et al., 2013) or may simply be the result of re-evaluated perceptions regarding the workplace. For instance, Bernhard-Oettel et al. (2013) found that employees who had perceived being in a non-preferred workplace but acquired a new, preferred job tended to increase their well-being over time. Regardless of the reason, it could be argued that no longer feeling locked-in should improve well-being. More specifically, we formulate the following hypothesis:

Hypothesis 3: Changing status from locked-in to non-locked-in will lead to improved well-being.

Risk of becoming locked-in

So far, our conceptualization involves two main categories – *locked-in* and *non-locked-in*. In addition, a third category can apply to those individuals who, despite acknowledging that they are in a non-preferred job, feel that it suits them for the time being. There may be several reasons for individuals to accept such an awkward position. For one, for some individuals, their job may primarily represent a means of earning a living or the decision to remain in it may depend more on their family needs (Ng & Feldman, 2007). Others may use their current job as a stepping stone towards a better job (de Jong, De Cuyper, De Witte, Silla, & Bernhard-Oettel, 2009), as a way to gain the experience necessary for reaching a certain career goal, or as a means of testing different employers or potential jobs and careers. Thus, accepting a job that fits for the time being, but that is not considered to be one's target job, may be a strategic choice at certain stages of one's life or career. This situation should not be associated with a risk of becoming locked-in per se, at least not as long as perceptions of one's own employability remain high.

Nevertheless, for individuals with low employability perceptions, accepting a job that fits for now but not for the future may be problematic, particularly if the perception of employability does not improve (or even decreases) with time. Thus, being in a currently satisfying, non-preferred job while perceiving low employability may constitute a risk of becoming locked-in over time. Being in this risk zone for becoming locked-in implies having a lack of control over one's career. Once again we draw on control theory (Carver & Scheier, 1982) and COR theory (Hobfoll, 1989) to explain how such a risk of becoming locked-in may relate to well-being. It is plausible that remaining in this risk zone is acceptable for a short time as the individual may hope to receive some (belated) rewards from the arrangement (Siegrist, 1996). With time, however, remaining in this

risk zone may become strenuous, since doubts may increase as to whether the reference state – in terms of a more preferred job – can ever be reached. Thus, remaining in a job that fits for the time being but not for one's future plans could result in a gradual decrease in resources in the form of energy depletion and strain if employability perceptions continue to be low (Hobfoll, 1989). Therefore, with respect to being in this risk zone for becoming locked-in, an intermediate status between being non-locked-in and locked-in, we propose:

Hypothesis 4: Individuals who are at risk of becoming locked-in at both time points will report a) better well-being compared to individuals who are locked-in over time but b) lower well-being compared to those who are non-locked-in over time.

Moreover, two types of negative change are conceivable in relation to this risk zone for becoming locked-in: (a) going from non-locked-in to at risk of becoming locked-in and (b) going from at risk to locked-in. Both changes can be associated with control loss (Carver & Scheier, 1982) and resource loss (Hobfoll, 1989) as a consequence of decreasing workplace preference in combination with low or declining employability perceptions. Accordingly, we hypothesize:

Hypothesis 5: A change in status (a) from non-locked-in to at risk of becoming locked-in or (b) from at risk of becoming locked-in to locked-in will lead to impaired well-being.

Finally, two types of positive change associated with being at risk of becoming locked-in are possible: (a) going from locked-in to at risk and (b) going from at risk to non-locked-in. Both reflect a gain of control (Carver & Scheier, 1982) and a gain of resources (Hobfoll, 1989) as a consequence of increased preference for the current workplace or increased employability perceptions. More specifically, we propose:

Hypothesis 6: A change in status (a) from locked-in to at risk of becoming locked-in or (b) from at risk of becoming locked-in to non-locked-in will lead to improved well-being.

Potential confounding variables

To avoid overestimation of the relationships between locked-in and well-being, it is important to take well-known social determinants of health and well-being, such as gender, age, and social class (Davey Smith et al., 1998; Marmot, 2005) into account. These variables may even affect locked-in perceptions; for instance, older and blue-collar workers generally perceive lower employability (Furåker et al., 2014) and older employees are less likely to change workplace (Aronsson et al., 2000). In addition, although employment among women is high in Sweden, the labour market is rather gender segregated (SOU, 2004:43). In order to delimit the impact of being in a non-preferred, dissatisfactory profession on well-being, which might confound the effects of being in a non-preferred workplace (Aronsson & Göransson, 1999), occupational preference at baseline was controlled for in addition to the demographic variables.

Method

Sample and procedure

The sample from this study was derived from the Swedish Longitudinal Occupational Survey of Health (SLOSH), a longitudinal cohort survey focusing on the associations between work organization, work environment, and health (Magnusson Hanson, Theorell,

Oxenstierna, Westerlund, & Hyde, 2008). SLOSH includes all of the respondents to the Swedish Work Environment Surveys of 2003 ($N = 9212$) and 2005 ($N = 9703$), comprising the main representative cohort of 18,915 individuals, which is representative of the Swedish working population of 2003 and 2005. All participants were followed for two-year time intervals by means of a postal questionnaire. All of the data collection was carried out by Statistics Sweden. Both SLOSH and the present study were approved by the Regional Research Ethics Board in Stockholm.

The present study is based on data from 3491 employees who answered the SLOSH questionnaires in 2010 (T1) and 2012 (T2) and who had permanent contracts at both time points. The sample comprises individuals with complete answers on all relevant questions for this study. Of these, 57% were females, and the mean age was 49 (SD 9) years, ranging from 24 to 71 years (2010). In the sample, 28% were blue-collar and 72% were white-collar workers.

Dropout analyses were conducted, comparing the effective longitudinal sample (3491) with those with available data at T1 but not at T2 ($N = 2124$). The analyses showed that the effective longitudinal sample consisted of slightly older employees (1.1 years) ($t = 3.83, p < .001$) and more white-collar workers (72% vs. 65%) ($\chi^2 = 34.17, p < .001$). There were no significant differences between the groups in regard to gender, occupational preferences, or the percentages of persons locked-in at their workplace. Further, there was no significant difference in the degrees of depressive symptoms between the two groups, but the dropouts did report a somewhat lower degree of subjective health (0.05 steps of a 5-step scale) ($t = 2.34, p < .05$).

Measures

Independent variables

Locked-in-related status. Employees were divided into three categories reflecting whether the person could be categorized as either being locked-in (2), at risk of becoming locked-in (1), or non-locked-in (0). This was done by combining measures of workplace preference and perceived employability. *Workplace preference* was measured with a question developed by Aronsson et al. (2000) (“Is the company/workplace where you work today the place you wish to work at in the future?”). There were three response alternatives (1 = *yes*, 2 = *no, but I’m satisfied right now*, 3 = *no, I’m dissatisfied with the company/workplace*). *Employability* was measured with a single item (Statistics Sweden, 2004) “How easy would it be for you to get another, similar job without having to change residence?” with the response alternatives ranging from 1 (very easy) to 4 (very hard), and including 5 (I don’t know). The last alternative was excluded and the index was dichotomized, (0 = (rather/very) high employability, 1 = (rather/very) low employability). Individuals who perceived low employability and also reported that they were in a non-preferred workplace at which they did not want to work anymore in the future were categorized as being locked-in, while the combination of perceiving low employability and being in a non-preferred workplace but satisfied right now was classified as at risk of becoming locked-in. All other combinations were categorized as being non-locked-in.

Locked-in-related patterns. Following the construction of the locked-in-related status variable, nine (3×3) new groups were created that reflect all possible change (or stability)

patterns regarding locked-in-related statuses between the two measurement points, in 2010 and 2012 (Table 1).

Outcome variables

Well-being was assessed twofold (1) by an overall rating of subjectively perceived health and (2) as an aspect of psychological well-being (depressive symptoms). *Subjective health*, which is commonly used for measuring perceived health status (Bailis et al., 2003) was assessed with a standard single item, “How would you rate your general state of health?” and the response alternatives ranged from 1 (very good) to 5 (very poor). The response scale was reversed so that a high value corresponded to high ratings of subjective health. *Depressive symptoms* were measured with six items capturing the person’s degree of depressive symptoms (Magnusson Hanson et al., 2014). An example item is “How much during the last week have you been troubled by worrying too much?”. Response alternatives ranged from 1 (not at all) to 5 (very much). Cronbach’s alpha was .90 for T1 and .91 for T2.

Control variables

Information about *gender* (1 = male, 2 = female) and *age* were obtained from register data. *Social class* was based on the Swedish socio-economic classification, which relies mainly on occupation data reported in the questionnaire but also takes length of education into account (Statistics Sweden, 1984). In the present study employees were categorized into blue-collar and white-collar workers. *Occupational preference* was measured with a question developed by Aronsson and Göransson (1999) asking “Is the profession you have today the one you wish to have in the future?” and has three answer alternatives (1 = yes, 2 = no, but I’m satisfied right now, 3 = no, I’m dissatisfied with the profession). The index was dichotomized; 0: corresponding to being in preferred occupation or being satisfied for the moment (answer alternatives 1 and 2), and 1: corresponding to the situation of being dissatisfied with the current occupation (answer alternative 3).

Data analysis

In order to compare how well-being was affected by locked-in-related patterns over a two-year time period, a repeated multivariate analysis of variance with covariates (MANCOVA) was performed using Predictive Analytics SoftWare Statistic 21. Repeated

Table 1. Changes in locked-in-related status between Time 1 and Time 2. Number of participants (with percentages in parentheses). Vertical axis: status at Time 1; Horizontal axis: status at Time 2.

Locked-in-related status at Time 1	Locked-in-related status at Time 2		
	NL N = 2505 (71.8%)	RL N = 754 (21.6%)	LI N = 232 (6.6%)
NL N = 2482 (71.1%)	NL–NL N = 2088 (59.8%)	NL–RL N = 316 (9.1%)	NL–LI N = 78 (2.2%)
RL N = 786 (22.5%)	RL–NL N = 348 (10.0%)	RL–RL N = 365 (10.5%)	RL–LI N = 73 (2.1%)
LI N = 223 (6.4%)	LI–NL N = 69 (2.0%)	LI–RL N = 73 (2.1%)	LI–LI N = 81 (2.3%)

Note: Non-locked-in (NL), risk of becoming locked-in (RL), and locked-in (LI). Total N = 3491 (100%).

measures of subjective health and depressive symptoms were used as the dependent variables and locked-in-related patterns (nine groups) as the grouping variable. Gender, age, social class, and occupational preference were controlled for at baseline and included in the analysis as covariates when the hypotheses were tested. To test the homogeneity of covariance matrices, a Box's M test was conducted and as the result was significant and smaller groups had larger variances, the more robust multivariate test, Pillai's trace, was conducted (Tabachnick & Fidell, 1996). Effect sizes of changes in subjective health and depressive symptoms were also determined.

Results

Table 2 presents the mean values of the included control variables for each pattern as well as the results of ANOVA/Chi-square tests for the differences between the patterns. As shown, there were no significant differences between exposure patterns regarding gender or social class compositions. Even though a slight difference with regard to age was indicated, subsequent post-hoc tests did not show any significant differences between any patterns. The patterns that included participants who were locked-in at T1 included more individuals being in a non-preferred occupation.

Multivariate effects

The results of the repeated MANCOVA with the locked-in-related patterns as the grouping variable and gender, age, social class, and occupational preference controlled for, showed that there was a significant multivariate effect of the locked-in-related patterns on well-being (Pillai's trace = .08, $F(16, 6956) = 17.05$, $p < .001$, partial $\eta^2 = .04$). In addition, there was a significant interaction effect (time*group effect), (Pillai's trace = .03, $F(16, 6956) = 7.12$, $p < .001$, partial $\eta^2 = .02$). More specifically, the interaction effect (time*group effect) was on subjective health, $F(8, 3478) = 6.47$ ($p < .001$; partial $\eta^2 = .02$) and on depressive symptoms, $F(8, 3478) = 10.17$ ($p < .001$; partial $\eta^2 = .02$). This indicates that changes in well-being over time differed between the patterns. More specifically, changes in locked-in-related status had an impact on both subjective health and depressive symptoms. There was no multivariate main effect of time ($F(2, 3477) = .27$, $p = .76$), but we found a significant multivariate effect of gender ($F(2, 3477) = 50.40$, $p < .001$; partial $\eta^2 = .03$), age ($F(2, 3477) = 27.46$, $p < .001$; partial $\eta^2 = .02$), and social class ($F(2, 3477) = 16.84$, $p < .001$; partial $\eta^2 = .01$). Hence, men, older individuals, and white-collar workers generally reported better well-being. We also found a significant multivariate effect of occupational preference ($F(2, 3477) = 20.07$, $p < .001$; partial $\eta^2 = .01$) and a significant interaction effect (time*occupational preference; $F(2, 3477) = 10.93$, $p < .001$; partial $\eta^2 = .01$). More specifically, being in a non-preferred occupation at T1 was negatively associated with well-being. Over time, however, both groups slightly improved their well-being, with those in non-preferred occupations at T1 improving a bit more.

Simple effects

Table 3 shows the F -test results regarding the multivariate simple effects of time on well-being within each locked-in-related pattern. There were significant changes for all patterns

Table 2. Means (SD) and distributions (%) for the control variables (age, gender, social class, and occupational preference) within the nine locked-in-related patterns as well as results from ANOVA and Chi-square analyses between the patterns at Time 1.

Locked-in-related patterns	Stable patterns			Negative change patterns			Positive change patterns			Total (N = 3491)	F/ χ^2
	NL-NL (N = 2088)	LI-LI (N = 81)	RL-RL (N = 365)	NL-LI (N = 78)	NL-RL (N = 316)	RL-LI (N = 73)	LI-NL (N = 69)	LI-RL (N = 73)	RL-NL (N = 348)		
Age	49.6 (9.1)	48.9 (7.9)	47.9 (8.8)	47.4 (9.6)	48.7 (9.4)	45.9 (9.1)	49.0 (8.3)	48.9 (8.5)	48.8 (9.0)	49.1 (9.1)	3.12**
Gender (% women)	56.2	59.3	57.8	57.7	57.3	64.4	68.1	61.6	54.6	56.9	7.42
Social class (% white-collar)	72.6	72.8	71.0	75.6	68.7	78.1	76.8	84.9	70.1	72.3	11.49
Occupational preference (% non-preferred)	1.9	38.3	2.5	9.0	3.2	5.5	30.4	34.2	1.4	4.3	543.02***

Note: N = 3491: Non-locked-in (NL), risk of locked-in (RL), and locked-in (LI).

* $p < .05$; ** $p < .01$; *** $p < .001$.

Table 3. Pairwise comparisons of well-being (subjective health and depressive symptoms) within locked-in-related patterns over time (based on estimated marginal means). Mean differences, standard errors, and Cohen's effect sizes are presented.

Locked-in-related patterns	Stable patterns			Negative change patterns			Positive change patterns		
	NL-NL (N = 2088)	LI-LI (N = 81)	RL-RL (N = 365)	NL-LI (N = 78)	NL-RL (N = 316)	RL-LI (N = 73)	LI-NL (N = 69)	LI-RL (N = 73)	RL-NL (N = 348)
Multivariate (F) Pillai's trace	23.94***	0.82	12.25***	11.98***	2.67	4.29*	13.88***	13.12***	22.04***
<i>Subjective health</i>									
Mean difference (T2-T1)	0.03	-0.10	-0.01	-0.36***	-0.02	-0.10	0.16	0.09	0.19***
Standard error	0.016	0.082	0.037	0.080	0.040	0.083	0.087	0.085	0.038
Effect size (d)				0.51			0.22		0.27
<i>Depressive symptoms</i>									
Mean difference (T2-T1)	-0.11***	0.02	-0.18***	0.25**	-0.08*	0.25**	-0.47***	-0.45***	-0.22***
Standard error	0.016	0.084	0.038	0.082	0.041	0.085	0.089	0.088	0.039
Effect size (d)	0.15		0.25	0.35	0.11	0.34	0.63	0.60	0.30

Note: Non-locked-in (NL), risk of locked-in (RL), and locked-in (LI).

* $p < .05$; ** $p < .01$; *** $p < .001$.

except with regard to those individuals with a stable locked-in pattern or who changed from non-locked-in to risk of becoming locked-in. This means that, overall, the patterns were associated with changes in well-being over time.

Being locked-in versus non-locked-in: testing hypotheses 1–3

Comparison of stable patterns. A comparison of the stable locked-in and the stable non-locked-in patterns revealed that the mean difference between the two patterns was .59 ($p < .001$) for subjective health and $-.82$ ($p < .001$) for depressive symptoms (Figure 1). This supports hypothesis 1, where locked-in individuals were expected to report lower well-being than non-locked-in individuals over time.

Analyses of change patterns. Decreased well-being was found for the non-locked-in to locked-in change pattern ($F(2,3477) = 11.98$, $p < .001$) where there was a significant

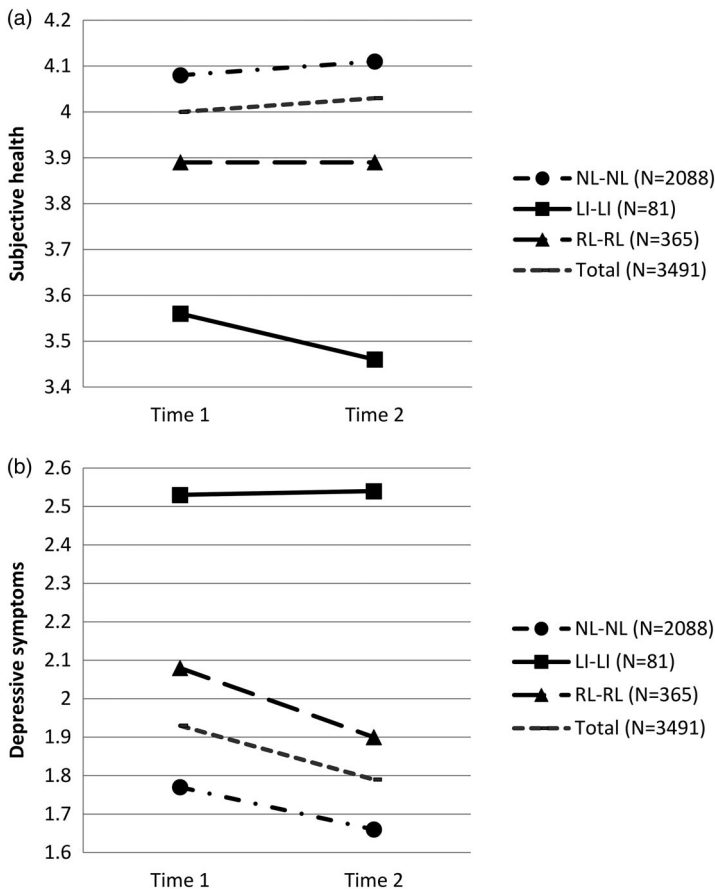


Figure 1. (a) and (b). Changes in subjective health (a) and depressive symptoms (b) over time for the stable locked-in-related patterns (gender, age, social class, and occupational preference controlled for). Note: NL for non-locked-in, RL for risk of locked-in, and LI for locked-in.

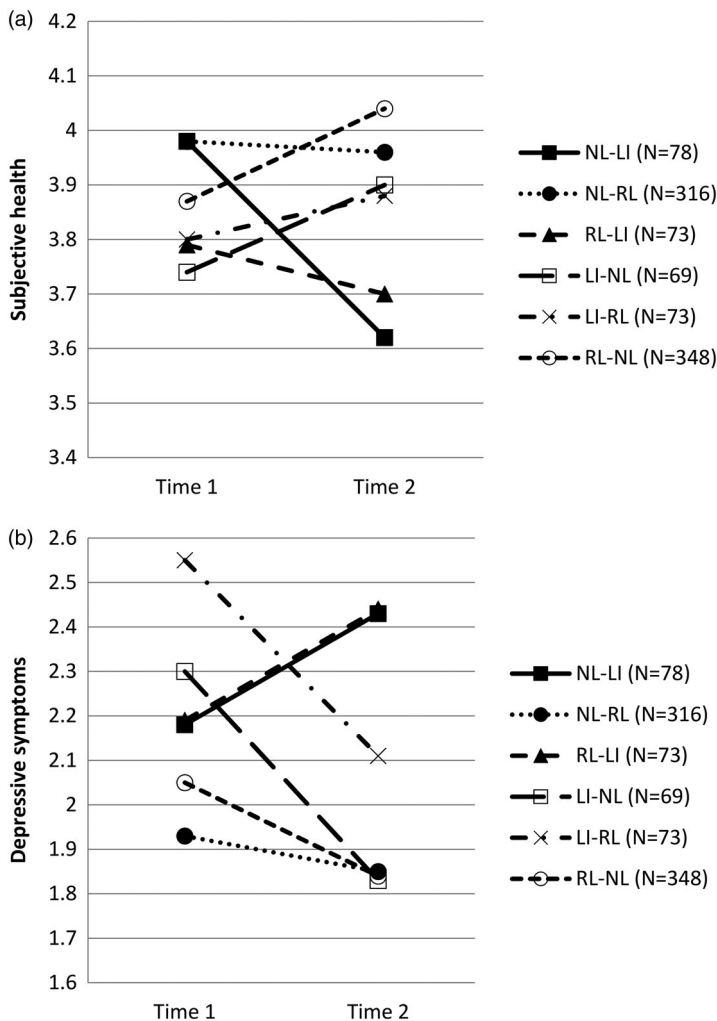


Figure 2. (a) and (b). Changes in subjective health (a) and depressive symptoms (b) over time for the locked-in-related patterns involving change (gender, age, social class, and occupational preference controlled for). Note: NL for non-locked-in, RL for risk of locked-in, and LI for locked-in.

decrease in subjective health that can be classified as medium in size (Cohen's effect size $d = .51$) between the two time points (Figure 2). A significant increase in depressive symptoms ($d = .35$) was also found for this pattern. This supports hypothesis 2, where a change in status from non-locked-in to locked-in was expected to lead to impaired well-being.

Regarding the locked-in to non-locked change pattern ($F(2,3477) = 13.88, p < .001$), a significant decrease in depressive symptoms was found ($d = .63$) that is consistent with a medium effect size, but there was no significant increase in subjective health (even though it was in the expected direction). This partly supports hypothesis 3, where a change in status from locked-in to non-locked-in was expected to lead to improved well-being.

Adding groups at risk of becoming locked-in: testing hypotheses 4–6

Comparison of stable patterns. In the next set of comparative analyses, the group at risk of becoming locked-in was investigated. A comparison of those who were at risk of becoming locked-in at both time points with those in the stable locked-in pattern revealed that the mean difference between the two patterns was .38 ($p < .001$) for subjective health and $-.55$ ($p < .001$) for depressive symptoms (Figure 1). This supports hypothesis 4a, where individuals at risk of becoming locked-in were expected to have better well-being than locked-in individuals over time. Further, comparing those who were at risk of becoming locked-in with those in the stable non-locked-in pattern revealed a mean difference of $-.21$ ($p < .001$) for subjective health and $.27$ ($p < .001$) for depressive symptoms. This supports hypothesis 4b, where individuals at risk of becoming locked-in were expected to report lower well-being than those who are non-locked-in over time.

Analyses of change patterns. Thereafter, we focused on changes from or to being at risk of becoming locked-in. For those patterns where locked-in-related status changed in a negative direction, the results were a little mixed (Figure 2). For the non-locked-in to at risk of becoming locked-in change pattern, there was no significant effect on well-being. Hence, hypothesis 5a was not supported. However, a significant negative effect ($F(2,3477) = 4.29$, $p < .05$) was found for the at risk of becoming locked-in to locked-in change pattern. There was a significant increase in depressive symptoms ($d = .34$) but no significant decrease in subjective health. Hence, hypothesis 5b was partly supported, where a change from at risk of becoming locked-in to being locked-in was expected to lead to impaired well-being.

Regarding persons whose locked-in-related status changed in a positive direction, a significant improvement in well-being was found for the locked-in to risk of becoming locked-in change pattern ($F(2,3477) = 13.12$, $p < .001$), showing a significant decrease in depressive symptoms ($d = .60$), but no significant increase in subjective health. Hence, hypothesis 6a was partly supported, where a change from locked-in to at risk of becoming locked-in was expected to lead to improved well-being.

With regard to the at risk of becoming locked-in to non-locked-in change pattern, there was a positive impact on well-being ($F(2,3477) = 22.04$, $p < .001$), showing a significant decrease in depressive symptoms ($d = .30$) and a significant increase in subjective health ($d = .27$). Hence, hypothesis 6b was supported, where a change from at risk of becoming locked-in to being non-locked-in was expected to lead to improved well-being.

Discussion

This study investigated how being locked-in at the workplace (conceptualized as being in a non-preferred workplace while at the same time perceiving having low employability) was related to well-being. The associations between both changing and stable locked-in-related patterns and well-being, operationalized as subjective health and depressive symptoms, were investigated.

The results indicate that being locked-in at the workplace is detrimental for well-being, and that changes in locked-in-related status affect well-being, which is consistent with previous research on non-preferred work and well-being (Aronsson et al., 2000; Aronsson & Göransson, 1999; Bernhard-Oettel et al., 2013; Furåker, 2010) and on employability and

well-being (Berntson & Marklund, 2007; De Cuyper et al., 2012; Kirves et al., 2014; Kirves, De Cuyper, Kinnunen, & Nätti, 2011). Individuals in the stable locked-in pattern reported lower well-being in regard to both their subjective health and depressive symptoms, compared to non-locked-in individuals on these occasions. Furthermore, in line with earlier research on less favourable job transitions (Bernhard-Oettel et al., 2013; Feldman et al., 2002), we found that a change from non-locked-in to locked-in was associated with impaired well-being, as reflected by a decrease in subjective health and an increase in depressive symptoms. A change in the other direction, from being locked-in to non-locked-in, was associated with a decrease in depressive symptoms, although no significant increase in subjective health could be found.

Furthermore, the results regarding the first three hypotheses tested in this study are largely in line with predictions derived from control theory (Carver & Scheier, 1982) and COR theory (Hobfoll, 1989). Being locked-in may indeed imply lacking control over a central aspect of life – that is, one's work situation (Aronsson, 1989; Aronsson & Göransson, 1999; De Cuyper et al., 2008; Fugate et al., 2004) – suggesting that individuals gain or lose control as their locked-in-related status changes, due to diminished or enlarged discrepancies between their current and desired reference states. In terms of COR theory (Hobfoll, 1989), being locked-in involves having to cope with the fact that the job does not fully match or fulfil one's needs, and dealing with this situation brings about energy depletions, which is likely to decrease well-being over time. Taken together, when locked-in-related status changes, the individual is likely to gain or lose control or resources, implying an increase or decrease in subsequent well-being.

In addition, the present study introduced a third category, comprising employees who are at risk of becoming locked-in. As expected, the risk group (conceptualized as working in a non-preferred job that fits for the time being but not for the future, and perceiving low employability) had an intermediate well-being position. Comparisons of stability patterns revealed that those who were in the risk zone for becoming locked-in at both time points reported better well-being compared to individuals with the stable locked-in pattern, but worse well-being compared to those with the stable non-locked-in pattern. This finding was valid both in terms of subjective health and depressive symptoms.

As regards changes associated with the risk group, the findings were a bit mixed. A change from non-locked-in to risk of becoming locked-in did not, contrary to our expectations, result in impaired well-being, which perhaps indicates that this particular change in itself is not so troublesome. A plausible explanation might be that employees just entering the risk zone may evaluate their situation as still controllable, and, thus, that a perception of declining control might only develop after a longer time span. Moreover, a negative change from risk of becoming locked-in to locked-in was only associated with an increase in depressive symptoms, but no change in subjective health.

On the other hand, changes in a positive direction, that is, from locked-in to risk of becoming locked-in and from risk of becoming locked-in to non-locked-in, proved to be beneficial for well-being, both in terms of subjective health and depressive symptoms, with the exception that we failed to find a significant increase in subjective health for the former pattern. That pattern, however, was related to a relatively sizeable decrease in depressive symptoms.

To summarize, the findings suggest that positive changes (i.e. from a status of locked-in towards the risk zone or a non-locked-in status, or from the risk zone to a non-locked-in

status) can be beneficial for the individual's well-being. Furthermore, negative changes resulting in a status of being locked-in (i.e. either a shift from a status of non-locked-in or from the risk zone) can be detrimental for the individual's well-being.

Methodological considerations and future research

There are methodological issues in the present study that should be considered. First of all, we focused on locked-in-related statuses over two time points, and categorized individuals based on their own reports of workplace preferences and employability perceptions. Thus, we are ignorant of the actual causes of the changes and do not know if they could, for example, be due to job transfers, work role changes, or to other alterations in their work-related or personal circumstances. However, now that we have established a longitudinal relationship between an employee's locked-in-related status and well-being, further studies could utilize this stricter conceptualization of locked-in (which extends the former operationalization of workplace preferences (Aronsson et al., 2000; Aronsson & Göransson, 1999) to also include perceptions of employability) to study its predictors, both personal and work-related. It may also be interesting to study the role of demographics, which surprisingly only differed a little in terms of age between the locked-in-related patterns in this study, but have been found to play a role in other analyses (see e.g. Fahlén et al., 2009; Furåker, 2010).

Second, regarding causality, poor well-being may not only be a consequence but also a cause of becoming or being locked-in, for example, if one's health status makes it difficult to acquire new employment. However, to the best of our knowledge, this is the first study on the link between locked-in and well-being that has investigated and found evidence for the existence of longitudinal associations. More research is highly warranted to test for different causality models and for the existence of possible gain or loss spirals (see COR theory, Hobfoll, 1989), preferably with more than two time measurements.

Third, another potential limitation, known as the "healthy worker effect", may have affected the results. Since only permanent employees working at both T1 and T2 were included in this study, those with the most health problems at T1 were perhaps more likely than others to have been excluded from our study since they may not have participated again at T2 (e.g. due to job loss, long-term sickness, or early retirement) and, as a result, adverse health consequences may be underestimated. However, the results of the dropout analysis do not suggest that this effect considerably impacted the results of the study, since the depressive symptom reports did not differ between the dropouts and the studied sample and, furthermore, the differences regarding subjective health were not very large. Also, even though there were some demographical differences (regarding age and social class), the sample and dropout groups did not significantly differ with regard to the locked-in-related status at baseline.

Fourth, since only self-report measures were used in this study, there is some risk of relationship inflation and, in turn, biased interpretations of the results (Spector, 1994). However, the use of self-reports has been suggested to be justified in many cases, such as in longitudinal studies and when individuals' perceptions are the focus (as in the present study) (Spector, 1994). Moreover, self-reported health has been found to be a reliable predictor for more objective health outcomes in many studies. For example, in a recent study, self-reported measures of health were found to be the strongest predictors

of mortality (Ganna & Ingelsson, 2015). Nevertheless, future studies should also investigate objective health effects.

Fifth, even if it is generally beneficial to use a longitudinal design, having a two-year time interval between measurement points is not necessarily optimal for capturing changes regarding locked-in-related status and its effects on well-being (Ford et al., 2014; Taris & Kompier, 2014). The time interval could be too long; for example, in cases where individuals change their workplaces or tasks often or re-evaluate their employability over the couple years, perceptions can change often. It could also be too short, for example, with regard to health consequences that may take longer to fully develop. Future studies may therefore benefit from following up on participants more frequently within a shorter time frame or from following them over periods longer than two years.

Sixth, the dichotomization of the perceived employability measure into low and high employability resulted in some loss of information, but this procedure made it possible to divide the individuals into different meaningful study patterns.

A final potential limitation concerns our use of several single-item measures. However, single-items have in some cases been shown to work as well as scales with multiple indicators, for instance, regarding health measures (Lundberg & Manderbacka, 1996) and for some work-stressors (Gilbert & Kelloway, 2014), especially if the intention is to measure a unidimensional construct.

Despite these potential limitations, the present study makes an important contribution to working life and well-being research by refining the locked-in concept to also include perceptions of employability and by delineating an intermediate position comprised of those who are at risk of becoming locked-in. Moreover, this study adds to existing knowledge by investigating the associations between the various locked-in-related statuses and well-being over two points in time and in a large nationwide Swedish sample of permanent employees.

Conclusions and practical considerations

Especially in times of high unemployment, one can expect that being locked-in at a workplace to be far from rare. Despite a growing number of studies focusing on job mobility, both voluntary and involuntary, research on involuntary non-transitions or non-mobility and its effects on well-being is still lacking. In an attempt to bridge this gap, this study investigated the effects of being locked-in on well-being, with being locked-in conceptualized as being in a non-preferred workplace along with having low perceived employability. In addition, we studied the effects of being at risk of becoming locked-in on well-being. In concordance with our hypotheses, the findings support the existence of a well-being gradient among the three stable locked-in-related patterns. Furthermore, our results indicated that changes in locked-in-related status over time were associated with changes in well-being, such that changes in a positive direction generally meant better well-being while changes in a negative direction seemed to mean poorer well-being.

Our findings indicate that being locked-in is detrimental to individuals' well-being. This may not only have implications for the employees themselves, but could also have a negative impact on the employer. In order to leave a disadvantageous locked-in-related status, individuals could either improve their perceived employability in order to

enhance their opportunities for acquiring a preferred job, or attempt to improve the situation at their current workplace in order to reduce feelings of non-preference for it. Furthermore, it seems to be important to timely identify even those at risk of becoming locked-in in order to avoid both a negative progression towards being locked-in and decreases in well-being. Screening questions related to job preferences and employability perceptions may help to detect those in the risk zones at an early stage; such question could be asked, for example, in organizational surveys or yearly evaluations of the psychosocial work environment. Managers and HR professionals may thus be able to facilitate more favourable developments that help employees direct their careers in their preferred direction in order to achieve a happier workforce consisting of individuals who are also more healthy and committed while in their present job. Appropriate interventions could be targeted at improving the current work situation, as well as enhancing the employees' employability, for example by offering competency development at work or career coaching. Finally, more research on understanding the locked-in phenomenon is warranted, regarding both its consequences and possible causes.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This research has been financed by Forte [grant number 2012-0979].

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