

Åshild Bødal

Healthy change processes

Relations with job insecurity, sickness absenteeism, sickness presenteeism and turnover intention.

Master in psychology, specialisation in work and organisational psychology

Trondheim, May 2017

Norwegian University of Science and Technology

Department of Psychology



Preface

The process of writing this master's thesis has been fun, although at certain times in the process stressful and demanding. Creating a survey from scratch, contacting participants, finding the best methods and writing up such a large piece of work takes a good dose of patience and perseverance. However, running into challenges along the way has not been a problem due to the help and support I have received along the way. I would therefore like to thank my supervisor Per Øystein Saksvik for all the good feedback and inspiration along the way. A special thank you also goes to Kyrre Svarva who has taken his time to help me with SelectSurvey and statistical issues, and always made me feel a tad more enlightened as I left his office. I would also like to thank my back for not giving in on me after several hours hunched over my computer. Last, but not least, a big thank you to all the respondents who took their time to participate in this study, and making it all possible to carry out.

Abstract

The aim of this study was to investigate whether the presence of a healthy change process (HCPI) could predict negative outcomes that normally follow organisational change, such as qualitative job insecurity, total sickness (sickness absenteeism and -presenteesim) and turnover intention. It was hypothesised that negative relationships existed between a healthy change process and qualitative job insecurity, total sickness and turnover intention. In addition, it was believed that experienced stress and subjective health would moderate these relationships. A difference in the perceived healthiness of the change between employees at two different university colleges was also investigated. The data was collected electronically at the University College of Southeast Norway and the Western Norway University of Applied Sciences, as they both underwent large scaled mergers (N= 116). The results from several multiple hierarchical regression analyses showed that when employees experience the change as healthy, they also experience less qualitative job insecurity, less total sickness and less turnover intention. No moderation effects of stress or subjective health was obtained for the above relationships. Results also showed that employees at the University College of Southeast Norway, who were one year ahead in terms of the merger, experienced the change as less healthy than employees at the Western Norway University of Applied Sciences. The findings contribute to expanding the literature on the healthy change processes framework and the usage of the HCPI, as well as showing the importance on creating and maintaining change environments that are experienced as healthy among employees.

Keywords: organisational change, healthy change processes, qualitative job insecurity, total sickness, turnover intention

Table of contents

Preface	iii
Abstract	v
Introduction	1
Actualisation	1
Background	2
Aim/Purpose.....	2
Theoretical framework	3
Organisational change.....	3
Healthy change processes	4
Job insecurity.....	6
Qualitative job insecurity.	7
Job insecurity & organisational change.	8
Total sickness: presenteeism & absenteeism seen together	9
Sickness and organizational change.	10
Turnover intention	11
Turnover intention & organizational change.	11
Moderator variables	12
Stress.	12
Stress & organisational change.	12
Health.	13
Health & organizational change.	13
Summary and hypotheses	15
Method	17
Participants.....	17
Procedure	18
Ethical issues.....	19
Materials/Instruments	19
Healthy Change Process Index –HCPI.	19
Qualitative job insecurity.	20
Total sickness	20
Turnover intention.	20
Stress.	21
Subjective health.....	21
Statistical analysis	21
Reliability analyses.....	21
Preliminary analyses.	21

Correlations.....	22
Hierarchical multiple regression.....	22
T-test.....	23
Results.....	25
Reliability analyses.....	25
Preliminary analyses.....	25
Correlations.....	26
Hierarchical multiple regression.....	27
T-test.....	30
Discussion.....	33
Healthy change and job insecurity.....	33
Healthy change and total sickness.....	35
Healthy change and turnover intention.....	37
Difference in perceived change healthiness between university colleges.....	39
Methodological considerations.....	39
The study's design.....	39
The survey.....	40
Self-reporting.....	40
The sample.....	41
Statistical analyses.....	41
Theoretical implications.....	42
Practical implications.....	43
Future research.....	43
Conclusion.....	45
References.....	47
Appendices.....	59
Appendix A – Approval of NSD application.....	59
Appendix B – Information respondents received by email through contact persons.....	61
Appendix C- The survey.....	62
Appendix D – Overview of the scales and items used in the survey.....	65
Appendix E – Items used to measure the healthiness of the change.....	65
Appendix F – Items used to measure qualitative job insecurity.....	65
Appendix G – Item used to measure sickness absenteeism.....	66
Appendix H – Item used to measure sickness presenteeism.....	66
Appendix I – Items used to measure turnover intention.....	66
Appendix J – Items used to measure stress.....	66
Appendix K – Item used to measure subjective health.....	66

List of figures

Figure 1. Summary of the causes, nature, effects and consequences of job insecurity.....7

List of tables

Table 1. Frequency distribution of all demographic variables (N= 116).....18

Table 2. Overview of the scales and items used in this study.....19

Table 3. Overview of the scales' reliability.....25

Table 4. Descriptive statistics of the continuous variables in this study.....26

Table 5. Bivariate correlations.....27

Table 6. Hierarchical regression analysis with predictors for qualitative job insecurity
(N=114).....28

Table 7. Hierarchical regression analysis with predictors for total sickness (N= 114).....29

Table 8. Hierarchical regression analysis with predictors for total sickness (N= 114).....29

Table 9. Hierarchical regression analysis with predictors for turnover intention (N= 114).....30

Introduction

Actualisation

The Norwegian workforce and workplace are going through changes, and several investigations shows that these changes are happening within most areas. In Stamina's (2016) Norwegian Job Health report with over 2500 participants, results showed that 7 out of 10 participants had experienced organisational changes within the last year. Over half of these employees felt that these changes had a negative impact on the work environment. The discontent was found to be highest among employees aged 40-49, a highly sought after employee group (Lausten & Solem, 2016; Stamina, 2016).

Organisational change is seen as necessary to meet new challenges in an increasingly global work market (Saksvik, Nytrø & Tvedt, 2008). The topic of organizational change has also been heavily covered by the media lately. In last year's NHO Annual Conference the topic of new technology, how it changes the way we work and the speed of this development, was heavily debated (NHO, 2016). In addition, municipal mergers, the new sharing economy, the oil crisis, university and college mergers, the increasingly aging population and the increase in immigration have put organisational change on the agenda. There is no doubt then, that organisational change is found in several, if not all, areas within the Norwegian labour market. However, studies on organisational change consistently show that changes are not easy to implement and that they often fail (Beer & Nohria, 2000; Clegg & Walsh, 2004; Nguyen & Kleiner, 2003). As a result, the psychosocial work environment is affected, and organisational change often leads to increased job demands and job insecurity, lower individual control, reduced role clarity, and changes in social relations and opportunities for social support. This, in turn, may lead to stress and poorer employee health as well as negatively impact the attainment of the change goals and the organisation's productivity (Saksvik et al., 2007).

The above findings show that it is important to protect the psychosocial work environment during a change process as to uphold employee well-being and organisational goals. "Healthy change processes" represent a framework containing criteria that needs to be in place to promote and preserve psychological health and the psychosocial work environment during organisational change (Saksvik et al., 2007). Previous studies have found that a healthy change process is related to reduced stress and health complaints (Tvedt, Saksvik & Nytrø, 2009). This thesis will therefore investigate whether a healthy change process may counteract some of the negative outcomes resulting from organisational change.

Background

The background for this study are the mergers between three university colleges in the western part of Norway as well as a merger between two university colleges in the South East of Norway. On the 1st of January 2016, the two colleges ‘University college in Buskerud and Vestfold’ and ‘University college in Telemark’ merged into the new multi-campus ‘University College of Southeast Norway’ (Høgskolen i Sørøst-Norge). By the time the current data was collected, this institution had been undergoing change in terms of establishing a new professional and administrative organisation, consistent administrative systems, and common policies and procedures for academic and administrative management. The merger was completed on the 1st of January 2017, and the merging university colleges are now run as one organisation. The other merger in this study is that between the ‘University college in Sogn & Fjordane’, the ‘University college in Bergen’ and the ‘University college Stord/Haugesund’. On the 1st of January 2017, these colleges merged into the new ‘Western Norway University of Applied Sciences’ (Høgskulen på Vestlandet) and the implementation itself will be ongoing throughout 2017. This institution is therefore almost a year behind the University College of Southeast Norway in terms of the merger.

Aim/Purpose

The aim of this study is to investigate whether the presence of a healthy change process may positively impact the potential negative outcomes of organisational change, such as job insecurity, sickness absenteeism, -presenteeism and turnover intention. In addition, measures of stress and subjective health has been included in the study due to the potential moderating effect they may contribute to the above variables. The research question thus becomes: *This study will seek to investigate whether a healthy change process (as measured by the HCPI) may predict job insecurity, sickness absenteeism, sickness presenteeism and turnover intention.*

Theoretical framework

Organisational change

In the field of organisational change, several perspectives, approaches and theories exist. Thus, there are no comprehensive, all-encompassing theories of the term (Dunphy, 1996). The term is broad and may therefore be defined in different ways depending on how it is studied. There does, however, exist different models and dimensions along which organisational change is described and characterised (Tvedt, 2013), some of which will be presented here.

Lewin (1951) put forward one of the first theoretical models of organisational change. He suggested that change would follow the three phases; I) Unfreeze – create motivation for change, II) Change- change is implemented, and III) Refreeze – stabilisation of the change interventions. Lewin's three-step model of planned change has influenced the research in the field and is central to an understanding of the concept by providing a framework for which to study change within (Lewin & Cartwright, 1951; Weick & Quinn, 1999). However, Lewin's model has been heavily criticised. One of the criticisms states that Lewin's model is too simplistic and linear to measure organisational change as a continuous and open-ended process (Burke, 2014; Dawson, 1994; Pettigrew 1990a, 1990b; Wilson, 1992). Newer approaches challenge the notion of change being an ordered, rational and linear approach, and rather see change as a dynamic, continuous process heavily influenced by context (Buchanan and Storey, 1997; Burnes, 2000; Dawson, 1994, 2003; Kanter, Stein & Jick, 1992; Pettigrew, 1997).

One way of characterising organisational change is differentiating between different types or categories of organisational change. Weick & Quinn (1999) consider two primary categories of organisational change; I) episodic change and II) continuous change. Episodic changes comprise changes that are infrequent, discontinuous and intentional. This type of change is labelled 'episodic' because it tends to occur in distinct periods where shifts are caused by external events (e.g. technological changes) or internal events (e.g. change in key personnel; Weick & Quinn, 1999). Planned episodic changes tend to involve larger scale disruptions with the goal of changing the organisations structure, system or resource- and power allocation (Burke, 2014). Episodic changes typically affect employees more than continuous changes, and can be of great significance for how the working situation is perceived (Saksvik, 2011). On the other hand, continuous change is typically unplanned, ongoing, cumulative and evolving, where the idea is that small, ongoing adjustments,

happening simultaneously across units, can cumulate and in that way, create substantial change (Weick & Quinn, 1999). Examples of continuous changes are adjustments in everyday work tasks (Saksvik, 2011).

Another distinction in the field of organisational change is that between a content or a process perspective. The content perspective concerns *what* to change and the purpose of the change, while the process perspective concerns *how* to implement or bring about the change (Burke, 2014). Process can be defined as “Individual, collective or management perceptions or actions in implementing any intervention and their influence on the overall result of the intervention” (Nytrø, Saksvik, Mikkelsen, Bohle & Quinlan, 2000, p. 214). This definition sees process as a matter of actions and reactions connected with implementing a change, rather than seeing how processes changes over time and in different contexts (Tvedt, 2013).

This thesis is based on the study of larger scaled, planned, episodic changes in the form of several college mergers and will make use of the process perspective. Because, the different colleges are in different phases of a merger, Lewin’s model might also be useful in explaining the results in terms of his three phases.

The most common types of changes are reorganisation, downsizing, outsourcing and mergers (Hilsen, Gjerberg & Steinum, 2004). From the media and through research in this area, it is clear that failure is often the outcome of organizational change (Saksvik et al., 2008), which in turn may lead to uncertainty for the future job situation (Blau, 2003; Bordia, Hobman, Jones, Gallois, & Callan, 2004; Furnham, 1997; Nguyen & Kleiner, 2003), reduced role clarity (Korunka, Scharitzer, Caratons, & Sainfort, 2003), a loss of control (Proctor & Dukakis, 2003; Worrall & Cooper, 1998), or changes in the social relations the employees have at work (Kivimäki, Vathera, Elovainio, Pentti, & Virtanen, 2003; Noel, 1998). In fact, empirical organization research shows that as much as half of all the organizational changes that are initiated fail somewhere along the process (Clegg & Walsh, 2004; Kramer, Dougherty & Pierce, 2004).

Healthy change processes

Because organisational change is so difficult to implement, a perennial research project seeking to address healthy change processes was initiated by Saksvik, Nytrø, Tvedt and colleagues in 2004. ‘Healthy change processes’ represent a framework consisting of criteria to enhance mental health during change processes, and the goal of the project was to assist the Norwegian Labour Inspection (NLI) in creating a foundation for research and guidelines for practical work in organisations that are undergoing change (Saksvik et al., 2007). This

research project was also based on the Norwegian Working Environment Act, which since the revision of 2006 has included requirements of organisational change processes (Arbeidstilsynet, 2007; Tvedt, 2013; Tvedt et al., 2009).

Their initial qualitative research revealed five dimensions that characterises healthy change; awareness of norms, awareness of diversity, manager availability, constructive conflicts and role clarification. The first two dimensions was later found to highly correlate in factor analyses, and is therefore treated as one dimension- awareness of diversity (Tvedt et al., 2009). The dimensions were operationalised and the questionnaire “Healthy Change Processes Index” (HCPI) was developed. The subsequent quantitative studies carried out using the HCPI found support for the four dimensions, that they together, can measure the change process’ healthiness based on the employees’ experience of the process (Saksvik et al., 2008; Tvedt et al., 2009). The different dimensions are discussed in more length below (Tvedt et al., 2009; Tvedt, 2013):

Awareness of diversity concerns the importance of being aware of different expressions of change process experiences, and an understanding that people react differently to change. These expressions may be influenced by factors such as previous experience, level of education and individual differences. The reactions also differ within and between organisations, and this is particularly true if the organisations are highly specialised and complex. By being aware of the diversity, managers get a more nuanced picture of the current climate concerning the change. Leaders with awareness of diversity contribute to a healthy environment where every voice is heard, rather than the voices of key spokespersons only.

Manager availability refers to the importance of information flow and dialogue between manager and employees on issues central to the individual worker. A tendency in large scale change processes is for the managers to withdraw to be able to achieve control over the situation, or to avoid needy or emotionally upset employees. However, if managers make themselves available for their employees, they mitigate uncertainty and ensures the goals and purposes of the change are communicated.

Constructive conflicts represent the acceptance of resistance as a natural, human response to change. Resistance to change can be seen as a form of defence mechanism that becomes activated in unpredictable circumstances. By managing constructive conflicts, all employee reactions are appraised. However, if resistance is dismissed as irrational, it can make bad matters even worse. As the concept of resistance is closely related with the concept of conflict, it implies disagreement with either the content or the process of the change, or both.

Role clarification is important to establish early in the process to reduce role stress by reducing role ambiguity and role conflicts. The two latter consequences are common, as transitions from old to new roles emerges in organisational changes. The change itself may lead to employees assuming additional roles connected to the change process. Establishing the new roles early on in the process is crucial, since role stress could potentially be destructive for the change initiative, and for both the work group and the individual employee.

One of the initial studies within this framework, wanted to investigate the relations of the HCPI to the demands-control-support model (DCS), and stress. This study found that the healthiness of the change was negatively related to stress, while a positive relationship was obtained for control and support, but not demands. The researchers saw this as support to the idea that a healthy change process may not be enough to reduce the additional demands a change bring about. However, a healthy change process may contribute to reduce stress and facilitate coping with both stress and the increased demands through strengthening the psychosocial work environment (Tvedt et al., 2009).

Healthy change processes will, in this study, be treated as a single construct. However, by having described the framework and criteria in more detail the reader will hopefully have acquired a useful insight into the theoretical basis of the construct.

Job insecurity

Job insecurity first became a topic of research in the United States in the 80s, with high rates of job loss following the prolonged economic downturn of the 70s, an upshot in mergers and acquisitions, the rapidly changing industrial changes and the decreasing workforce union representation. These events often led to job loss or loss of job privileges and changed the employee's assumption of the stability of their employer. Outcomes such as these can be perceived as threats, and the threat may in turn be experienced as some degree of job insecurity. Greenhalgh & Rosenblatt (1984) defines job insecurity as "perceived powerlessness to maintain desired continuity in a threatened job situation" (p. 438).

The same authors postulated a model for job insecurity (Figure 1). This model claims, that the subjective experience is based on an objective threat. Subsequently, individual, organisational and external factors affect how the individual interpret the objective threat. When it comes to organisational factors, information has crucial influence on job insecurity. For instance, one source of information is organisational announcements (Greenhalgh & Rosenblatt, 1984). These are typically minimal in times of organisational change (Jick & Greenhalgh, 1981) and can lead to individual misinterpretations and rumours. The employees'

judgement of the threat level towards their own job situation in addition to the feeling of helplessness, will also impact the subjective threat level. Individual differences that may influence the experience of job insecurity is the individual's locus of control and the need for security. Examples of external pressures, on the other hand, are economic circumstances and occupational mobility. The final part of the model explains the negative consequences of job insecurity, such as propensity to leave and resistance to change, which in turn leads to reduced organisational effectiveness (Greenhalgh & Rosenblatt, 1984).

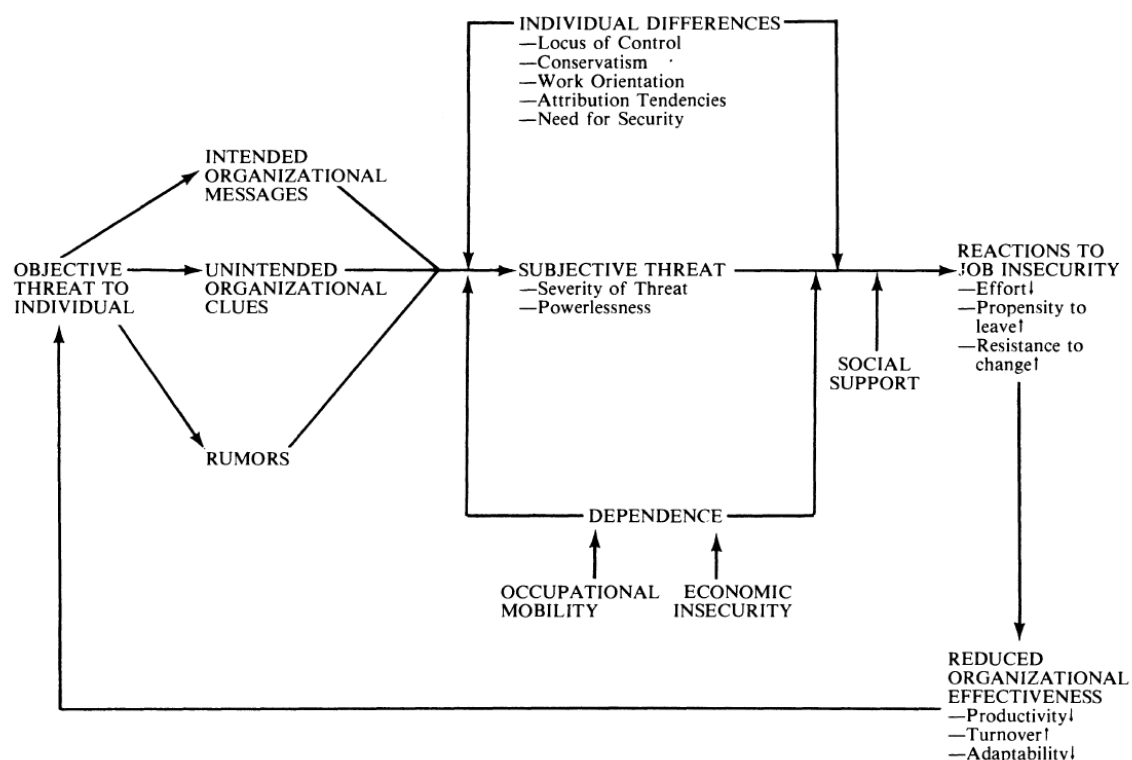


Figure 1. Summary of the causes, nature, effects and organisational consequences of job insecurity.

Qualitative job insecurity. The scientific community has gradually come to a consensus that there is a distinction between job insecurity as a global phenomenon and as a multidimensional phenomenon. The global perspective on job insecurity has focused on threats of imminent job loss (Hellgren, Sverke & Isaksson, 1999), while the multidimensional perspective focuses not only on the threat of job loss, but also the loss of valued job features (Ashford, Lee & Bobko, 1989; Greenhalgh & Rosenblatt, 1984; Hartley et al., 1991; Hartley & Klandermans, 1986; Hellgren, Sverke & Isaksson, 1999; Roskies & Louis-Guerin, 1990). Hellgren et al. (1999) uses the terms quantitative and qualitative job insecurity for these two dimensions of perceived loss of continuity in a job situation. Quantitative job insecurity refers to concerns about the future of one's job, while qualitative job insecurity involves perceived

threats to the working condition, career opportunities and salary development - all factors which may impair the quality of the employment relationship.

Most of the studies in this field are based on the quantitative perspective. Research has found that job insecurity is related to negative consequences for the employee's working condition, attitudes, behaviour and health (Cheng & Chan, 2008; De Witte, Vander Elst & De Cuyper, 2015; Probst, 2002; Sverke, Hellgren & Näswall, 2006; Vander Elst, Näswall, Bernhard-Oettel, De Witte & Sverke, 2016). Job insecurity is also related to poorer psychological health (De Witte, De Cuyper, Vander Elst, Vanbelle & Niesena, 2012) and higher turnover (King, 2000). Research focusing on both the quantitative- and qualitative perspective has found that the latter correlates more strongly with employee's attitude towards work, while quantitative job insecurity has a stronger relation with health problems (Hellgren et al., 1999). De Witte et al. (2010) concluded in their study on the topic, that both types of job insecurity pose an equal threat to the individual's well-being. Because this study investigates a merger, where employees might face new work tasks and roles, an instrument that measures qualitative job insecurity has been made use of here.

Job insecurity & organisational change. Since job insecurity refers to the negative reactions employees have concerning changes in their jobs, this concept is naturally closely related to and often found during organizational change. Although a subjective concept, some describe job insecurity not only as a function of subjective characteristics of the individual (e.g. family responsibility, employability) but also as a function of the objective situation (e.g. organizational change; Sverke & Hellgren, 2002). Greenhalgh and Rosenblatt (1984) states that information is an important factor that may influence job insecurity. Communication and information is also a crucial element in the criteria for achieving a healthy change process (Saksvik et al., 2008). Sufficient and high quality information during organisational change is found to reduce job insecurity (Parker, Axtell & Turner, 2001; Schweiger & Denisi, 1991), while increasing psychological well-being, job satisfaction and job engagement (Jimmieson, Terry og Callan, 2004).

In terms of management availability, available managers are found to be more supportive, which in turn is associated with decreased job insecurity (Rafferty & Griffin, 2006). As organisational change may bring about new roles and tasks for the employee, communicating these early in the process, to increase role clarification, will reduce the experienced job insecurity (Keim, Landis, Pierce & Ernest, 2014; Saksvik et al., 2007). During organizational change, conflicts and bullying arises more often (Andersen, 2006). Destructive conflicts affect employees and the work environment negatively, while

constructive conflicts can contribute to understanding and clarification (Andersen, 2006; Jehn, 1995), which presumably may decrease job insecurity.

Based on the above empirical findings, it is expected that a healthy change process will reduce the experienced qualitative job insecurity.

Total sickness: presenteeism & absenteeism seen together

Sickness presenteeism (SP) is when an employee attends work despite being so ill that sick leave is judged to be proper (Bergström, Bodin, Hagberg, Aronsson & Josephson, 2009). It has been found, that as many as 63% to 83% of employees has reported going to work in spite of feeling ill at least once during the previous year (Aronsson & Gustafsson, 2005; Elstad & Vabø, 2008; Hansen & Andersen, 2008). In recent years SP has gotten increased attention, and a growing body of literature now suggest that SP can impair employee health, leading to poor general health (Aronsson, Gustafsson, & Mellner, 2011; Bergström et al., 2009; Gustafsson & Marklund, 2011), increased risk of heart disease (Kivimäki et al., 2005), and future sickness absenteeism (Bergström et al., 2009; Hansen & Andersen, 2009). Ailments typically associated with SP are migraines, headaches, allergies, gastrointestinal problems, asthma and depression (Ceniceros, 2001; Goetzel et al., 2004). These ailments are often deemed benign and does not force a person to take sick leave, but reduces a person's productivity (Ceniceros, 2001; Goetzel et al., 2004; Lowe, 2002).

Sickness absenteeism, when a person takes sick leave due to poor health or illness, tend to be studied together with sickness presenteeism when it comes to research on attendance behavior (Aronsson & Gustafsson, 2005; Johns, 2010; Steers & Rhodes, 1978). This is because employees who are sickness absent also tend to be sickness present (Aronsson, Gustafsson, & Dallner, 2000; Gustafsson & Marklund, 2011). A Canadian study found that employees are substituting sickness presence for sickness absence, which were in line with their substitution hypothesis. The authors also posited a formulation for total sickness consistent with the substitution hypothesis: $Total\ sickness = f(Sickness\ Absenteeism + Sickness\ Presenteeism)$. The implication of this formulation being presenteeism and absenteeism playing complementary roles in predicting or estimating total sickness. For instance, at low levels of presenteeism, absenteeism will be a better predictor than presenteeism for total sickness, and vice versa (Caverly, Cunningham & MacGregor, 2007). This study will make use of this formulation to measure total sickness, and thus combining the presenteeism and absenteeism measures to create the variable 'total sickness'.

Sickness and organizational change. The same Canadian study mentioned above, investigated absenteeism and presenteeism at a workplace following major organizational change in the form of downsizing. They found that employees continued to work while ill significantly more often than staying away when ill, and that employees who were sickness present did not suffer from different ailments and were not any less sick than those employees who were sickness absent (Caverly et al., 2007). Another study found that sickness absenteeism increased by 7% for employees affected by organizational change versus only 2% for employees in the control group (i.e. not affected by change; Hanson, Vingård, Arnetz, Anderzèn, 2008). A Norwegian study found an increase in sickness absenteeism and disability among employees resulting from reorganizing and cutting costs in the health care sector (Røed & Fevang, 2007).

A Swedish study on presenteeism during organizational change, found that particularly employees who provide services for others (e.g. welfare and teaching) had an increased risk of being at work despite of illness. The employees facing this risk were all working in sectors that had undergone personnel cutbacks during the previous decade (Aronsson, Gustafsson & Dallner, 2000). Organisational change processes are also believed to create a form of attendance pressure, which at first may reduce sickness absenteeism, but in the long run may lead to higher work related absence (Arbeidstilsynet, 2008; Caverly et al., 2007; Saksvik, 1996).

Research in this field has found several factors that influence absenteeism, such as increased job insecurity and decreased job satisfaction (Caverly et al., 2007), and increased job demands and decreased job resources (Schaufeli, Bakker & Van Rhenen, 2009). Factors influencing presenteeism are higher job insecurity (Aronsson et al., 2000; Theorell et al., 2003; Virtanen, Kivimäki, Elovainio, Vahtera & Ferrie, 2003), higher job demands (Aronsson et al., 2000; Beale and Nethercott, 1988; Knutsson & Goine, 1998; Lewis and Cooper, 1996; Lowe, 2002; Virtanen, 1994) and decreased job opportunity, job security, supervisor support and job satisfaction (Caverly et al., 2007). Many of the above factors are also possible outcomes of organisational change that a healthy change process may counteract. For instance, a healthy change process may lead to less job insecurity and higher supervisor support.

To the authors knowledge, no study has investigated the impact a healthy change process (as measured by the HCPI) might have on sickness absenteeism and presenteeism. These two measures have therefore been included in this study to explore whether a healthy change process may counteract the negative outcomes a change process may have on total

sickness. It is expected that a healthy change process will be beneficial for the total sickness of employees.

Turnover intention

Turnover intention is the conscious and deliberate wilfulness to leave an organisation. It is often measured with reference to a specific interval (e.g. by next year, or within the next six months), and has been described as one of the last stages of withdrawal cognitions -a set of cognitions where intent to search for new jobs and thinking about quitting also belongs (Mobley, Horner & Hollingsworth, 1978). In a meta-analysis investigating factors influencing actual turnover, previous turnover intention and job satisfaction was found to be the most important predictors of turnover intention. Other factors that may influence turnover are organizational commitment, comparison of alternative jobs, stress, and autonomy (Griffeth, Hom, and Gaertner, 2000). Although this meta-analysis investigated actual turnover, others have found some of these same factors to also influence turnover intention – in particular job satisfaction and organizational commitment (e.g. Tett & Meyer, 1993).

Turnover intention & organizational change. Rafferty and Griffin (2006) has investigated the effects organizational change, as measured by characteristics such as the frequency, impact and planning of the change, has on turnover intention. They found that the planning of change (i.e. deliberation and preparation prior to implementation) was negatively related to turnover intention and mediated by psychological uncertainty. In terms of the healthy change processes framework, this finding could relate to communication and the importance of manager availability and early role clarification. Through sufficient communication, manager availability and early role establishment, the planning of the change is increased, which in turn could reduce turnover intention. These factors may also positively impact job insecurity, which could mediate this effect.

Another relevant finding in the study was that the impact of change had a direct positive effect on turnover intention. The impact of change being the individual perception of the change leading to modifications in ways of working, values, structure and strategy. According to the researchers, this provides support for the unfolding model of turnover intention (Lee, Mitchell, Wise & Fireman, 1996), which suggests that ‘shocks to the system’ shift employees toward deliberate decisions about their jobs and, perhaps, to voluntarily resign from their jobs. Changes with a high impact seem to encourage people to carefully consider their position in an organization (Rafferty & Griffin, 2006). This finding can relate to all four criteria of a healthy change process. If a healthy change process can generate more available management,

early role clarification, better handling of constructive conflicts and at the same time create more awareness of the workplace diversity, the impact of the change the organization is going through may not be such a 'shock to the system', but make for a smoother transition.

Based on the findings above, it is expected that a healthy change process will reduce turnover intention.

Moderator variables

Stress. There exists several definitions and theoretical models of stress (Cooper, Dewe & O'Driscoll, 2001), however this study will make use of Lazarus' (1966;1990;1995) transactional perspective. This perspective is concerned with the dynamics of psychological mechanisms of cognitive appraisal (i.e. the personal interpretation of a situation) and coping that underpin a stressful encounter. According to Lazarus, there are two types of appraisal; primary and secondary. The experience of stress is firstly defined by a person's realization that there is something at stake (primary appraisal). In this stage, the individual gives meaning to an encounter, such as involving harm, threat to harm or challenge. After an encounter is evaluated as some form of threat to the person's well-being, the secondary appraisal begins. This process involves identifying available coping resources to deal with the potential threats or challenges. Stress then, is not a factor that only resides in the individual or the environment, but is an ongoing process where the individual is transacting with its environment, making appraisals of those encounters and finding ways to cope with the issues that arise. Stress emerge when the demands of an encounter surpasses the resources available to cope, and thereby threatening the well-being (Lazarus, 1995).

Stress & organisational change. The research literature provides available information on the expected influence that organizational change may have on the psychosocial work environment as defined by the demand-control-support model (DCS) and stress. Organisational change has been found to have consequences such as adverse changes in demands (Kivimäki, Vahtera, Pentti & Ferrie, 2000), loss of control (Kivimäki et al., 2000), and decreased social support (Kivimäki et al., 2003; Noel, 1998). These consequences may in turn contribute to increased stress (Kivimäki et al., 2003; Korunka et al., 2003). As already mentioned above, one of the initial studies using the HCPI, found that the healthiness of the change is negatively related to stress and that a healthy change process may reduce experienced stress and facilitate coping with stress.

Since stress has already been found to be affected by a healthy change process, a stress measure was included in this study for the purposes of being used as a moderating variable in

the analysis. Previous studies have found that job stress is associated with an increase in sickness presenteeism and absenteeism (e.g. Elstad & Vabø, 2008) and turnover intention (e.g. Arshadi & Damiri, 2013; Yoon & Kim, 2010). In addition, job stress is closely related with job insecurity (Ashford et al., 1989; Greenhalgh & Rosenblatt, 1984). It is therefore expected that job stress will have a moderating effect on total sickness, turnover intention and job insecurity.

Health. Health is a difficult and controversial concept, and consists of physical, psychological and social aspects (Mæland, 2009). The World Health Organization (WHO) defines health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO, 2006, p.1). According to the WHO the main determinants of health are the social and economic environment, the physical environment and individual characteristics and behaviours (WHO, n.d.). The workplace is comprised of all these elements, and while undergoing change, these environments may change and individuals may react and behave differently. This in turn, may affect the health of the employees.

Health & organizational change. Several studies have found that organizational change can lead to a negative impact on the employee’s health. In a longitudinal study, Falkenberg, Fransson, Westerlund and Head (2013) found that employees who had experienced change or anticipated change reported more negative short-term health effects (minor psychiatric disorder and poor self-rated health) compared to the control group. Another study found similar results, where employees working under change or anticipating change in the near future, increasingly self-rated their health as ‘average or worse’. An increase in longstanding illness, minor psychiatric morbidity and body mass index (BMI) were also found among these employees (Ferrie, Shipley, Marmot, Stansfield & Smith, 1998).

Poor health, such as stress, muscular-skeletal disorders, acute medical conditions, poor mental health and minor illnesses such as colds and headaches has been found to be the top reasons for both long-and short term sickness absenteeism in the last decades (Hiscock, 2001; The Telegraph, 2011). Absenteeism due to poor health is also reported several places (e.g. Cole & Neumayer, 2006; Hackett, Bycio & Guion, 1989; Zhang, Bansback & Anis, 2011). Poor health has been proposed to be a prerequisite for sickness presenteeism (Caverly et al., 2007), where minor or benign illnesses does not force employees to stay away from work, but still reduces the employees’ productivity (Ceniceros, 2001; Goetzel et al., 2004; Lowe, 2002). A subjective health measure has been included in this study to act as a moderator variable, and it is thus expected that health may moderate total sickness.

Summary and hypotheses

Organisational change leads to several outcomes for the individual that may have a negative impact on employees' well-being. First, it may lead to higher job insecurity due to more work-related conflicts, unavailable management and poorer communication for instance. Second, increased job demands and decreased job resources and supervisor support following a change may have a negative impact on sickness absenteeism and -presenteeism. Third, turnover intention may be a result of organisational change when the change is poorly planned and the impact of the change is high. It is also expected that stress and health will moderate the effects of some of these variables. In this study, it is expected that a healthy change process will counteract some of the negative outcomes organisational changes normally leads to. Thus, the following hypotheses are presented:

Hypothesis 1a: A perceived healthy change process (as measured by the HCPI) will have a negative relationship with job insecurity.

Hypothesis 1b: This relationship will be moderated by stress.

Hypothesis 2a: A perceived healthy change process (as measured by the HCPI) will have a negative relationship with total sickness (absenteeism and presenteeism).

Hypothesis 2b: This relationship will be moderated by stress.

Hypothesis 2c: This relationship will also be moderated by subjective health.

Hypothesis 3a: A perceived healthy change process (as measured by the HCPI) will have a negative relationship with turnover intention.

Hypothesis 3b: This relationship will be moderated by stress.

In addition to testing the research question's hypotheses, it would also be interesting to investigate whether there is a difference in the perceived healthiness of the change between employees of the two different university colleges. This, due to the two colleges being in different stages of the fusion, where the University College of Southeast Norway is a year ahead of the Western Norway University of Applied Sciences. Thus, a fourth hypothesis is stipulated:

Hypothesis 4: There is a difference in the perceived healthiness of the change between employees at the University College of Southeast Norway and the Western Norway University of Applied Sciences.

Method

The merger between the University college in Buskerud and Vestfold and the University college in Telemark (now the University College of Southeast Norway), as well as the merger between the University college in Sogn & Fjordane, the University college Stord/Haugesund and the University college in Bergen (now the Western Norway University of Applied Sciences) form the basis of this master thesis. Data was collected through a survey in the form of a cross-sectional study to provide empirical evidence for the study's research question and hypotheses.

Participants

The participants in this study consists of administrative employees at the University College in Sothern Norway and the Western Norway University of Applied Sciences. The survey was sent to the participants through contact persons of each university college, and thus the exact number of who received the survey is not known. However, SelectSurvey shows that a total of 210 people opened the survey, and that 116 of these completed the survey in full, giving a response rate of 55%. This number may thus have been lower, depending on whether the survey was sent to more employees than those who opened the survey.

The participant selection consisted of 35 men (30.2%) and 80 women (69%). One participant did not specify gender (.9%). Most of the participants were in the age category '30-50 years of age' (63.8%) while a few were 'under 30' (12.1%) and 'over 50' (21.1%). 63 participants were employed at the University College of Southeast Norway (54.3%), while 52 participants were employed at the Western Norway University of Applied Sciences (44.8%). There was one missing response on this variable (.9%). 8 participants had a management position (6.9%), 16 had a middle management position (13.8%) and 92 had an employee position (79.3%). The majority of the participants had no personnel responsibility (n=97, 83.6%). Only 18 participants reported having such responsibility (15.5%). There was one missing response for personnel responsibility (.9%).

Table 1
Frequency distribution of all demographic variables (N= 116)

Variable	n	%
Gender		
Male	35	30.2
Female	80	69.0
No reply	1	.9
Age		
Under 30	14	12.1
30-50	74	63.8
Over 50	28	21.1
No reply	-	-
Employed at		
University College of Southeast Norway	63	54.3
Western Norway University of Applied Sciences	52	44.8
No reply	1	.9
Type of position		
Management	8	6.9
Middle management	16	13.8
Employee	92	79.3
No reply	-	-
Personnel responsibility		
Yes	18	15.5
No	97	83.6
No reply	1	.9

Procedure

Initial contact with the university colleges were established through email with the respective headmasters of each college. They agreed to send the survey to their employees after having reviewed the survey themselves. The employee selection was therefore decided by the headmasters, and after discussing the topic of selection, all headmasters agreed that the administrative staff would be the best sample. This due to these employees being most strongly affected by the merger. To make the online survey, NTNU's digital online survey tool, SelectSurvey, was chosen. SelectSurvey allows you to apply a variety of functions for multiple choice answers and visual design, as well as providing the opportunity to extract a syntax file of raw data to transfer to statistical programs. The link to the online survey were sent to the contact persons responsible for forwarding it to the employees on the 12th of November 2017, and the link remained open for answering throughout November and December.

Ethical issues

This study has been reported to and approved by the Norwegian Centre for Research Data (Norsk Senter for Forskningsdata, NSD; see Appendix A) The study was approved by the headmasters of each college, but the respondents did not agree to participate in advance. The web-survey contained information about the project, the purpose of the study and contact information of the project managers. The survey also stated that participation was voluntary, and that consent was given by completing the survey. Respondents were informed that their responses would be handled confidentially and that full anonymization of the data would occur by 1st of June 2017.

Materials/Instruments

In addition to the instruments described below the demographic variables age, gender, type of job position, and whether employees have any personnel responsibility was included in the survey. The survey can be found in its entirety in Appendix C. All the instruments below were chosen based on having been previously validated and in terms of accessibility.

Table 2

Overview of the scales and items used in this study

Variable	Scale/item
Healthy change process	Healthy Change Process Index, HCPI. Tvedt et al. (2009).
Qualitative job insecurity	Isaksson, Hellgren & Petterson (1998), shown in Hellgren, Sverke & Isaksson (1999)
Sickness absenteeism	Gustafsson & Marklund (2011; 2014)
Sickness presenteeism	Aronsson, Gustafsson and Dallner (2000)
Turnover intention	Cammann, Fichman, Jenkins, and Klesh (1979).
Stress	Perceived Stress Scale, PSS4. Cohen & Williamson, 1988
Subjective health	Bailis, Segall & Chipperfield (2003)

Healthy Change Process Index –HCPI. The HCPI (Tvedt et al., 2009) was used to measure the healthiness of the change process, and measures manager availability, constructive conflicts, awareness of diversity and role clarification. A high score on the HCPI indicates a healthy change. The scale consists of 13 items, measured on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). Examples of items are “My immediate manager is so busy that it is difficult to have a one-on-one discussion” (manager availability) and “Various areas of responsibility and tasks are rapidly clarified” (Role clarification). See Appendix E for all items.

Qualitative job insecurity. Qualitative job insecurity is measured by a scale developed by Isaksson, Pettersson and Hellgren (1998), shown in Hellgren et al., (1999, p. 195). The scale consists of four questions measuring quantitative job insecurity (fear of losing one's job) and four questions measuring qualitative job insecurity (fear of losing important aspects of one's job). This study has chosen to measure the latter, due to the organisational change being a merger and not, say, a downsizing where losing one's job would be a more imminent threat. The questions are answered on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), and an example question is; "My future career opportunities in the organisation are favourable". See Appendix F for all items.

Total sickness. *Sickness absenteeism* was measured using a single item: "How many days in the last 12 months have you been absent from work because of sick leave?". The response categories were "None", "Five days or less", "6-10 days", "11-23 days" and "More than 24 days". Sickness absenteeism was operationalised as having more than six days during the last 12 months. This cut-off corresponds with those of previous studies (Gustafsson & Marklund, 2011, 2014; Rostad, Milch & Saksvik, 2015). Some researchers choose to dichotomise this variable into 0 = 'none' or '6 days or less' and 1 = 'More than 6 days'. This was however not done in this study, due to the argument of dichotomising continuous variables in regression analyses leading to a considerable loss of statistical power (Royston, Altman & Sauerbrei, 2005).

Sickness presenteeism was measured using a question developed by Aronsson, Gustafsson and Dallner (2000); "During the past 12 months, how many times did you go to work even though you should have taken sick leave?" Response categories were "None", "Once", "2-5 times" and "More than 5 times". This measure corresponds with current research practice (Aronsson & Gustafsson, 2005; Aronsson et al., 2011; Bergström et al., 2009; Claes, 2011; Gosselin, Lemyre & Corneil, 2013; Gustafsson & Marklund, 2011, 2014; Hansen & Andersen, 2008, 2009; Leineweber et al., 2011). Sickness presenteeism was operationalized as reporting to or more incidents during the last 12 months, which corresponds with the cut-off used in earlier research (Aronsson & Gustafsson, 2005; Aronsson et al., 2000; Gustafsson & Marklund, 2011; Leineweber et al., 2011; Rostad et al., 2015). This variable was also not dichotomised for the same reasons mentioned above.

Turnover intention. The turnover intention measure was developed by Cammann, Fichman, Jenkins, and Klesh (1979). It is a 3-item scale asking about job choice, where respondents is asked to indicate how accurately each statement described them. Response

options ranged from 1 (strongly disagree) to 5 (strongly agree). An example of a question is “I often think of leaving the organization”. See Appendix H for all items.

Stress. Stress is measured by the four item Perceived Stress Scale (PSS4; Cohen & Williamson, 1988). This is a validated short form version of the PSS14, developed by Cohen, Kamarck & Mermelstein (1983). The original measure used a scale from 0 (never) to 4 (very often), however, this study used a five-point Likert scale ranging from 1(never) to 5 (very often). One of the questions were; “In the last month, how often have you felt confident about your ability to handle your personal problems?”. See Appendix I for all items.

Subjective health. Subjective health was measured by the single question; “How would you characterise your own health at this moment?”. The response categories were “Very good”, “Good”, “Not so good” and “Poor”. The subjective health measure is an intuitive and spontaneous health judgement where the respondents may answer quickly and weigh the different options against each other. At the same time, there is evidence for this method to reflect a pervasive and dynamic self-perception (Bailis, Segall & Chipperfield, 2003).

Statistical analysis

IBM Statistical Package for the Social Sciences (SPSS) version 24 were used to analyse the data material. Items were coded together in their appropriate scales, and negatively charged items in the survey were reverse scored. The scales’ reliability was measured as well as running preliminary analyses and descriptive statistics. Further on, correlation analyses were used to investigate correlations between variables. To investigate the study’s hypothesis, hierarchical multiple regression analyses and t-tests were made use of.

Reliability analyses. Reliability refers to a scales internal consistency and indicates to what extent the items that make up the scale correlates and whether they measure the same phenomenon. Reliability is usually estimated by using the Chronbach’s alpha coefficient (α) with values ranging from 0 to 1. A scale is considered as having internal consistency when Chronbach’s alpha (α) values over .70 are obtained (Pallant, 2013).

Preliminary analyses. Descriptive statistics and visual inspection of the data were carried out to describe the sample as well as investigate whether the data meet the assumptions for the statistical analysis (Pallant, 2013). ‘Skewness’ and ‘kurtosis’ were checked to investigate the normality of the data, where values close to 0 indicate a normal distribution. Outliers were visually inspected using boxplots, as well as comparing the mean and the 5% trimmed mean. For the latter comparison, large differences suggest the outliers

affect the mean scores to a larger extent, and that they should be removed (Field, 2009; Pallant, 2013).

Correlations. Correlation analyses were performed to investigate the strength and direction of the relationship between variables. Cohen's guidelines are used to interpret the correlation coefficients: Weak correlation; $r = .10 - .29$, moderate correlation; $r = .30 - .49$, and strong correlation: $r = .50 - 1.0$ (Cohen, 1988).

Hierarchical multiple regression. To investigate whether the independent variable (HCPI) predict the study's dependent variables (total sickness, job insecurity and turnover intention), four hierarchical multiple regression analyses were performed. Because one or more moderation effects are also hypothesised for each of the dependent variable, the moderator variable and the interaction effect were included in block 2 and 3, respectively. In this way, hypothesis 1a, 2a and 3a will be tested in model/block 1, while the remaining hypothesis will be tested in block 3, in their respective analyses. To avoid multicollinearity, the predictor variables were centered, and an interaction term were created for the centered variables. The outcome variable was kept in its original form (Jose, 2013).

The method of hierarchical multiple regression was chosen because this type of analysis is suitable for testing specific hypothesis and to make assumptions based on a theoretical basis (Tabachnick & Fidell, 2014). To assess the strength of the beta coefficients, Keith's (2015) rule of thumb is utilised: Values below .05 is considered insignificant, values above .05 as small, values above .10 as moderate, and values above .25 as large.

Assumptions. The assumptions behind hierarchical multiple regression were also checked. The first assumption for running a hierarchical multiple regression is to have enough *observations* (N). Green (1991) suggests at least 50 observations, plus 8 observations for each independent variable in the regression analysis. In this study, two independent variables are used in each regression analysis, and thus a sample size of at least 66 is necessary.

Second, regression analyses are sensitive to *outliers*. This assumption was tested by visually inspecting the scatterplots of each regression analysis, where standardised residuals of less than -3.3 or larger than 3.3 are defined as outliers. In addition, outliers were checked with the Mahalanobis' statistic, which measure the distance of cases from the mean of the predictor variable (Field, 2009). According to Barnett and Lewis' (1978) table of critical values, for a sample size of N=100 with 2 predictors, the critical value is 14.22 at a significance level of .05. Thus values above approximately 14 may be cause for concern.

Third, multicollinearity needs to be checked. This refers to too high correlations among the variables in the model. Correlations larger than .70 are seen as problematic as this makes

the contribution of each variable to the model difficult to distinguish. As a supplement to this, Tolerance and Variance inflation factor (VIF) statistics were inspected. Tolerance indicates how much of the variability of the specified independent variable is not explained by the other independent variables in the model, and values should not be less than .10. VIF indicates how much of the variance that increases due to high correlations between variables, and should not exceed 10 (Pallant, 2013).

Finally, the residuals should be checked for homoscedasticity, normality and linearity. The *homoscedasticity* assumption means that the variance around the regression line should be the same for all values of the predictor variable, and this can be checked by visually inspecting the residual scatterplots for the regression analyses. *Normality* means the residuals should be normally distributed, while *linearity* refers to residuals having a straight-line relationship with the predicted dependent variable scores (Pallant, 2013). Residuals should also be independent of each other, meaning that the residuals for each observation should not correlate. The Durbin Watson statistic was used to investigate this, and values close to 2 are preferable as this shows the residuals are not correlated (Field, 2009).

T-test. To investigate hypothesis 4, an independent t-test (two-tailed) was used. A t-test was chosen because it is suitable to compare the mean scores on a continuous variable, for two different groups of participants (Pallant, 2013).

Assumptions. There are several assumptions that need to be checked in order to carry out the t-test. First, the dependent variable needs to be continuous and normally distributed. Second, the observations should be independent of one another. Third, the samples need to be obtained from populations of equal variance. Homogeneity of variance, or homoscedasticity, can be checked using Levene's test, where *p*-values larger than .05 suggests equal variance in the populations (Pallant, 2013). An effect size is also calculated using Cohen's *d*, which presents the difference between groups in terms of standard deviation units: $d = 0.2$ is considered a small effect, $d = 0.5$ a medium effect and $d = 0.8$ a large effect.

Results

Reliability analyses

Reliability analysis were performed on all the scales in the study. The items making up the scales Healthy Change Process Index (HCPI), qualitative job insecurity, turnover intention and stress all showed sufficient internal consistency (Table 3). However, one of the items of the HCPI scale as well as one item on the Stress scale did not show adequate correlation with the total scale. In line with Pallant's (2013) recommendation of removing items with values below .20, and a subsequent assessment of the item's meaning, these two items were removed from each scale. New reliability analyses showed satisfactory internal consistencies (Table 3).

Table 3
Overview of the scales' reliability

Scales	<i>n</i> items	Cronbach's α
HCPI	12	.88
Qualitative Job Insecurity	4	.74
Turnover Intention	3	.82
Stress	3	.72

Preliminary analyses

To handle missing values in the dataset, the mean of each scale variable was calculated so that at least half of the items in each scale would have to be answered. For the 3-item scales, two out of three items were set as a limit for inclusion. After utilising this method for calculating the new scale variables, only 2 responses were missing for the HCPI variable (1.7%). The reason for these missing responses may be that the participants found the questions not to be applicable to their working situation, or that they were not comfortable with replying on questions involving their workplace and their superiors. No missing responses were found for the other scales.

After converting the 'skewness' and 'kurtosis' values into z-scores, all scales and single-item scales showed values below 2.58, and therefore met the assumption for normal distribution. 2.58 is an accepted cut-off point for medium to large sample sizes (Field, 2009). Visual inspection of the P-P plots shows that the data points fall close to the diagonal line of the expected z-scores. A total of six outliers were found in the dataset corresponding to the variables subjective health, total sickness (absenteeism + presenteeism) and stress. All these responses were however found to be genuine responses, and comparing the mean and the 5%

trimmed mean did not yield differences large enough to warrant exclusion. All outliers were therefore retained in the dataset.

Table 4 shows the descriptive statistics in terms of number of observations (n), total mean scores (M) and standard deviations (SD) for the HCPI, qualitative job insecurity, turnover intention, stress, total sickness and subjective health variables.

Table 4

Descriptive statistics of the continuous variables in this study

Variable	n	M	SD
HCPI	114	3.13	.84
Qualitative job insecurity	116	2.53	.78
Turnover intention	116	2.44	1.08
Stress	116	2.74	.55
Total sickness	116	2.05	.84
Subjective health	116	1.78	.70

Correlations

Table 5 shows correlations between the variables in this study. HCPI shows a moderate negative correlation with qualitative job insecurity ($r = -.49$, $p < .01$), a strong negative correlation with turnover intention ($r = -.55$, $p < .01$), and weak negative correlations with stress ($r = -.16$, $p < .01$), total sickness ($r = -.28$, $p < .01$) and subjective health ($r = -.17$, $p < .05$). Moderate positive correlations were found between subjective health and turnover intention ($r = .38$, $p < .01$), subjective health and stress ($r = .38$, $p < .01$), and total sickness and turnover intention ($r = .32$, $p < .01$), while weak positive correlations were obtained between total sickness and stress ($r = .27$, $p < .01$), stress and turnover intention ($r = .16$, $p < .05$), total sickness and qualitative job insecurity ($r = .29$, $p < .01$), and subjective health and qualitative job insecurity ($r = .27$, $p < .01$). Strong positive correlations were observed between subjective health and total sickness ($r = .57$, $p < .01$), and between turnover intention and qualitative job insecurity ($r = .65$, $p < .01$).

Table 5
Bivariate correlations

	1	2	3	4	5	6	7
1.HCPI	-						
2.Qualitative job insecurity	-.49**	-					
3.Turnover intention	-.55**	.65**	-				
4.Stress	-.16*	.04	.16*	-			
5.Total sickness	-.28**	.29**	.32**	.27**	-		
6.Subjective health	-.17*	.27**	.38**	.38**	.57**	-	
7.University college	.28**	-.02	.00	-.19*	-.05	-.08	-

Note. * $p < .05$ (one-tailed). ** $p < .01$ (one tailed).

Hierarchical multiple regression

Before the analyses were interpreted, all the assumptions for hierarchical multiple regression were checked. The analysis was based on 114 observations, which is well above Green's (1991) recommended limit. Outliers were investigated in the preliminary analysis. The correlation matrix (Table 5) shows that there is no multicollinearity in the data, as the correlations shows no values greater than .70. In addition, Tolerance and VIF values were within the recommended limits. Visual inspection showed that the assumptions for normally distributed residuals, homoscedasticity and linearity were met. The Durbin Watson statistics were close to 2 for all the analyses.

Hypothesis 1a and 1b. A hierarchical multiple regression analysis was performed to investigate whether a perceived healthy change process may predict qualitative job insecurity and whether this relationship is moderated by stress.

Model 1 (Table 6) could significantly explain variance in qualitative job insecurity. HCPI in model 1 explained 24% of the variance for qualitative job insecurity, $R^2 = .24$, $F(1, 112) = 35.11$, $p < .001$. Model 2 and Model 3 could not significantly predict any additional variance in qualitative job insecurity.

Hypothesis 1a postulated that a perceived healthy change process would have a negative relationship with qualitative job insecurity. The results from Model 1 shows that HCPI is a significant predictor of qualitative job insecurity ($\beta = -.49$, $p < .001$). This means that employees who experience a healthy change process also experience less qualitative job insecurity, and hypothesis 1a was accepted.

Hypothesis 1b postulated that the relationship between HCPI and qualitative job insecurity would be moderated by stress. No such effect was obtained. Model 3 shows that the

interaction term cannot significantly predict qualitative job insecurity ($\beta = .02, p > .05$).

Hypothesis 1b was therefore rejected.

Table 6

Hierarchical regression analysis with predictors for qualitative job insecurity (N= 114)

	Variable	B	SE B	B	R ²	Adjusted R ²	ΔR^2
Model 1					.24***	.23***	.24***
	HCPI	.44	.08	-.49***			
Model 2					.24	.23	
	HCPI	.44	.08	-.49***			
	Stress	-.00	.12	-.00			
Model 3					.24	.22	
	HCPI	.44	.08	-.49***			
	Stress	-.00	.12	-.00			
	HCPI x Stress	.03	.13	.02			

Note. N = 114. *** p < .001 (one tailed).

Hypothesis 2a, 2b and 2c. Two hierarchical multiple regression analyses were performed to investigate whether a perceived healthy change process may predict total sickness and whether this relationship is moderated by stress and/or health. Table 7 presents the analysis with stress as a moderator and Table 8 with subjective health as a moderator.

Model 1 (Table 7) could significantly explain variance in total sickness. HCPI in model 1 explained 8% of the variance in total sickness, $R^2 = .08, F(1, 112) = 9.39, p < .01$. Stress was entered in block 2, and the model then explained 13% of the variance in total sickness, $R^2 = .13, F(1,111) = 8.50, p < .01$. The model's explanatory power thus increased with 5%, $\Delta R^2 = .05, \Delta F(1,111) = 7.10, p < .01$. Model 3 could not significantly predict any additional variance in total sickness.

Model 1 in Table 8 is the same as in Table 7. When subjective health was entered in block 2, 37% of the variance in total sickness is explained by the model, $R^2 = .37, F(1, 111) = 32.33, p < .001$. The model's explanatory power thus increased with 29%, $\Delta R^2 = .29, \Delta F(1,111) = 51.07, p < .001$. Model 3 could not significantly predict any additional variance in total sickness.

Hypothesis 2a postulated that a perceived healthy change process would have a negative relationship with total sickness. The results from Model 1 (Table 7) shows that HCPI is a significant predictor of qualitative job insecurity ($\beta = -.28, p < .01$). This means that

employees who experience a healthy change process also experience less total sickness, and so hypothesis 2a was accepted.

Hypothesis 2b postulated that the relationship above would be moderated by stress. No such effect was obtained. Model 3 (Table 7) shows that the interaction term cannot significantly predict qualitative job insecurity ($\beta = -.02, p > .05$).

Table 7
Hierarchical regression analysis with predictors for total sickness (N= 114)

Variable	B	SE B	β	R ²	Adjusted R ²	ΔR^2
Model 1				.08**	.07**	.08**
HCPI	-.28	.09	-.28**			
Model 2						
HCPI	-.24	.09	-.24**			
Stress	.36	.14	.24**			
Model 3				.13	.11	
HCPI	-.24	.09	-.24**			
Stress	.37	.14	.24**			
HCPI x Stress	-.03	.15	-.02			

Note. N = 114. ** p < .01 (one tailed).

Hypothesis 2c postulated that the relationship between HCPI and total sickness would be moderated by subjective health. No such effect was obtained. Model 3 (Table 8) shows that the interaction term cannot significantly predict qualitative job insecurity ($\beta = -.08, p > .05$). Both stress (Table 7; $\beta = .24, p < .01$) and subjective health (Table 8; $\beta = .55, p < .001$), when controlling for HCPI, are significant predictors of total sickness. However, because no moderating effect was found for both moderator variables, hypothesis 2b and 2c was rejected.

Table 8
Hierarchical regression analysis with predictors for total sickness (N= 114)

Variable	B	SE B	B	R ²	Adjusted R ²	ΔR^2
Model 1				.08**	.07**	.08**
HCPI	-.28	.09	-.28**			
Model 2				.37***	.36***	.29***
HCPI	-.19	.08	-.18*			
Subjective health	.65	.09	.55***			
Model 3				.37	.36	.01
HCPI	-.18	.08	-.18*			
Subjective health	.65	.09	.55***			
HCPI x Subjective health	-.12	.10	-.08			

Note. N = 114. * p < .05 (one tailed). ** p < .01 (one tailed). *** p < .001 (one tailed).

Hypothesis 3a and 3b. A third hierarchical multiple regression analysis was performed to investigate whether a perceived healthy change process may predict turnover intention and whether this relationship is moderated by stress.

Model 1 (Table 9) could significantly explain variance in turnover intention. HCPI in model 1 explained 30% of the variance in turnover intention, $R^2 = .30$, $F(1, 112) = 48.14$, $p < .001$. Model 2 and 3 could not significantly predict any additional variance in turnover intention.

Hypothesis 3a postulated that a perceived healthy change process would have a negative relationship with turnover intention. The results from Model 1 shows that HCPI is a significant predictor of turnover intention ($\beta = -.55$, $p < .001$). This means that employees who experience a healthy change process also experience less turnover intention and thus hypothesis 3a was accepted.

Hypothesis 3b postulated that the above relationship would be moderated by stress. No such effect was obtained. Model 3 shows that the interaction term cannot significantly predict qualitative job insecurity ($\beta = -.04$, $p > .05$). Hypothesis 3b was therefore rejected.

Table 9
Hierarchical regression analysis with predictors for turnover intention (N= 114)

Variable	B	SE B	B	R ²	Adjusted R ²	ΔR^2
Model 1				.30***	.29***	.30***
HCPI	-.70	.10	-.55***			
Model 2				.31	.29	
HCPI	-.69	.10	-.54***			
Stress	.13	.16	.07			
Model 3				.31	.29	
HCPI	-.69	.10	-.54***			
Stress	.14	.16	.07			
HCPI x Stress	-.09	.17	-.04			

Note. N = 114. *** p < .001 (one tailed).

T-test

To investigate hypothesis 4, a two-tailed t-test was performed. All assumptions for independent t-tests were met.

Hypothesis 4 postulated that there would be a difference in perceived healthiness of the change between employees at the University College of Southeast Norway and the Western Norway University of Applied Sciences. The results show that employees at the University

College of Southeast Norway ($M = 2.92$, $SD = .79$) perceive the healthiness of the change as worse than employees at the Western Norway University of Applied Sciences ($M = 3.38$, $SD = .82$). This difference is statistically significant, $M = .46$, 96% CI (-.76, -.16), $t(111) = -3.02$, $p < .01$. Cohen's d had a value of .09, which indicates a large effect. Thus, support for hypothesis 4 was obtained.

Discussion

The purpose of this study was to investigate whether the presence of a healthy change process could counteract the negative outcomes of a change process, such as qualitative job insecurity, total sickness and turnover intention. The results from the study's four hierarchical multiple regression analyses indicates that a healthy change process can predict all three outcomes. As such, it seems that a healthy change process leads to less qualitative job insecurity, less total sickness and less turnover intention. Using interaction terms to investigate whether these outcomes were additionally moderated by stress and/or health did not however yield any significant results. A t-test was used to test any differences between employees at the two university colleges in perceived healthiness of the change. It was found that employees who worked for The University College of Southeast Norway perceived the change as less healthy than employees working for the Western Norway University of Applied Sciences. In the discussion section the findings are considered in line with possible explanations. Subsequently, methodological considerations, as well as theoretical and practical implications, are presented. Finally, suggestions for future research are discussed.

Healthy change and job insecurity

In line with hypothesis 1a, a significant negative relationship was found between perceived healthiness of the change (HCPI) and qualitative job insecurity. As seen in Table 6, the correlation between the two variables is considered to be large (Keith, 2015). This indicates that employees who perceive the change as being healthy, also experience less qualitative job insecurity. Previous theories have proposed that organisational changes that fail leads to increased job insecurity among employees (e.g. Blau, 2003; Bordia et al., 2004; Nguyen & Kleiner, 2003). It seems that a healthy change process can counteract this effect to some degree. This is in line with theory that propose sufficient communication (e.g. Greenhalgh & Rosenblatt, 1984; Parker et al., 2001), management availability (Rafferty & Griffin, 2006) and early role clarification (Keim et al, 2014; Saksvik et al., 2007) during organisational change all play a part in reducing job insecurity among employees.

A possible explanatory factor behind this finding is that of sufficient information flow or communication. Communication during organisational change can be crucial for experiencing the change as healthy (Saksvik et al., 2008) and thus reducing job insecurity (e.g. Greenhalgh & Rosenblatt, 1984). If the employees receive sufficient information throughout all stages of the organisational change, it may positively impact how employees

react to the change. By communicating with employees, the management also gets an opportunity to become aware of the different individual reactions that exists (awareness of diversity), which allows for every individual to be heard. This again is closely related with constructive conflicts, and the fact that resistance to change should be appraised and discussed to avoid resistance growing stronger. Information is also a crucial element in establishing early role clarification, as it is difficult for employees to attain new roles if these are not clearly explained. When it comes to information, the managers' availability is therefore extremely important. It will be difficult to communicate information regarding the change unless the manager is available for the employees. If one looks at Greenhalgh and Rosenblatt's (1984) model of job insecurity, it may also be that sufficient information regarding the change can reduce unintended organisational clues and rumours, which in turn will reduce both the severity of the subjective threat and the powerlessness employees may experience.

Another explanatory factor behind this finding could relate to the experience of stress during organisational change. A connection between organisational change and increased stress has been found to exist, mainly due to the deterioration of the psychosocial work environment during change (Kivimäki et al., 2003; Korunka et al., 2003). Increase in demands and loss of control and support are also found during organisational change, which in turn increases stress reactions among employees (Kivimäki et al., 2000; Kivimäki et al., 2003; Noel, 1998). Additionally, the literature shows that stress is closely related to job insecurity (Ashford et al., 1989; Greenhalgh & Rosenblatt, 1984). It may be then, that employees who perceive the change process as being healthy may not experience a deterioration in the psychosocial work environment and thus not suffer from the same severity in stress reactions, and consequently job insecurity, as those who perceive the change as unhealthy. Relating to the above is the buffering hypothesis. This hypothesis propose that social support buffer the adverse effects of stress during stressful events (Cohen & Wills, 1985). Evidence have found support for this hypothesis both in everyday life (Cohen & Wills, 1985), and in organisations (Terry, Nielsen & Perchard, 1993). The latter relating to supervisor support buffering job stress. Therefore, manager availability may be a particularly important factor influencing job stress, and in turn job insecurity, among employees during times of change.

With regards to hypothesis 1b, no significant effect was obtained. That is, stress was not found to moderate the negative relationship between HCPI and qualitative job insecurity. No previous studies have investigated this moderating effect between these two variables. The correlation matrix in Table 5 shows a very weak relationship between stress and job

insecurity, which goes against previous literature that states the two concepts are closely related (Ashford et al., 1989; Greenhalgh & Rosenblatt, 1984). Table 4 shows that the sample's mean score on the HCPI is $M = 3.13$. On a scale ranging from 1 (change perceived as unhealthy) to 5 (change perceived as healthy), this perhaps shows that, on average, the employees perceive the change closer to the healthy end of the scale. Thus, it may be that the change is perceived as healthy enough to buffer stress and thus removing any potential moderating effect stress may have had on the relationship between the HCPI and job insecurity. This is in line with one of the initial studies using the HCPI, which found a healthy change process to reduce experienced stress (Tvedt et al., 2009). Since social support reduces job stressors (e.g. Tvedt et al., 2009), management availability may have played a crucial role in reducing stress. Addressing Table 3, the mean score of stress ($M = 2.74$) is fairly low for this sample, suggesting that employees do not face a lot of stress during this change. This could provide additional support for the above explanation.

Healthy change and total sickness

In line with hypothesis 2a, a significant negative relationship was found between the perceived healthiness of the change (HCPI) and total sickness. As seen in Table 7, the correlation between the two variables is considered large (Keith, 2015). This indicates that employees who perceive the change process as healthy also experience lower total sickness. This is in line with the assumptions this hypothesis was built on, which was based on more general findings in the field. Previous studies provide evidence for organisational change leading to more total sickness among employees affected by the change (e.g. Caverly et al., 2007; Røed & Fevang, 2007; Saksvik, 1996). Thus, it appears a healthy change process counteracts sickness absenteeism and -presenteeism that usually occur during organisational change. There may be several reasons for this.

One explanatory factor is that a healthy change may indirectly reduce total sickness by directly reducing some of the negative factors influencing it. As explained above, sufficient communication during the change may reduce job insecurity. Job insecurity in turn, has been found to be an important factor behind both absenteeism (Caverly et al., 2007) and presenteeism (e.g. Aronsson et al., 2000). Decreased job resources (Schaufeli et al., 2009) and supervisor support (Caverly et al., 2007) are also among some important factors influencing total sickness. If the participants in this sample perceive their manager as available, they are also likely to perceive more supervisor support. Early role clarification could be a potential factor contributing to increasing job resources, as employees who have clearly established

their new roles would also know their available resources. Awareness of diversity, another criterion of a healthy change, may also play a contributing factor to this finding. It is thought that the silent individuals might be those who struggle the most with the change and subsequently suffer from health issues and absenteeism (Saksvik et al., 2007). Thus, hearing the 'silent voices' may contribute to lower total sickness.

Another explanatory factor is related to the relationship between total sickness and mental health. The healthy change process framework is believed to enhance mental health during change processes (Saksvik et al., 2007). The last statistical updates on absenteeism in Norway show that mental health plays a major role in sickness absenteeism. 19,8% of GP reported sick leave is related to mental health issues (NAV, 2016). Low control (Finne, Christensen & Knardahl, 2014), high role conflict and job insecurity (Johannesen, Tynes & Sterud, 2011), as well as low social support (Finne et al., 2014) and high quantitative- and emotional demands (Stansfield & Candy, 2006; Johannesen et al., 2011) are found to be work related risk factors for widespread mental disorders. Although previous studies using the HCPI have found that a healthy change process may not reduce additional demands, it is likely to believe a healthy change process may impact the other risk factors while facilitating coping with the increased demands through strengthening the psychosocial work environment (Tvedt et al., 2009). For instance, manager availability may increase social support, while early role clarification is likely to reduce role conflict. A healthy change process may in this way contribute to decreasing mental health issues which in turn reduces total sickness among employees.

When it comes to hypothesis 2b, no significant moderation effect was obtained. That is, stress was not found to moderate the relationship between the HCPI and total sickness. With regards to the moderating effect of stress for this relationship, the same explanation as expanded on for hypothesis 1b may apply. That is, that the change may be perceived as healthy enough to buffer stress and thus removing any potential moderating effect stress may have had on total sickness. Previous studies have found that when employees report low job stress, reports of total sickness are moderate. When job stress is reported as high, total sickness is reported as high (e.g. Elstad & Vabø, 2008). Thus, it may be that a healthy change may positively influence job stress to the degree that stress does not have a moderating effect on the relationship between change healthiness (HCPI) and total sickness. This is in line with previous research that has found that a healthy change reduces the experience of stress (Tvedt et al., 2009).

Regarding hypothesis 2c, no moderating effect of subjective health on the relationship between the HCPI and total sickness was obtained. One would expect that subjective health, which correlates highly with total sickness (Table 5), would moderate the strength of the negative relationship between the perceived healthiness of the change and total sickness. Again, it may be that when employees perceive the change as healthy, this may buffer the effect health has on this relationship, to the degree that the relationship between perceived healthiness of the change and total sickness does not depend on the subjective health of the employee. Since previous studies have found several negative health related outcomes resulting from organisational change (e.g. Falkenberg et al., 2013; Ferrie et al., 1998), the reason behind the above logic may be that a healthy change decreases such negative outcomes to the extent that subjective health shows no moderating effect on the relationship between the HCPI and total sickness.

Healthy change and turnover intention

In line with hypothesis 3a, a significant negative relationship was found between the perceived healthiness of the change (HCPI) and turnover intention. As seen in Table 9, the correlation between the two variables is considered a large one (Keith, 2015). This indicates that employees who perceive the change as healthy also experience less turnover intention. This is in line with the assumptions this hypothesis was built on. Previous studies have found that organisational change has a positive relationship with turnover intention. It seems then, that a healthy change process may counteract this negative outcome. There may be several reasons for this.

One explanatory factor behind this finding relates perhaps to organisational commitment. Organisational commitment is found to greatly influence both actual turnover and turnover intention (Griffeth et al., 2000; Tett & Meyer, 1993). Relating to this, change uncertainty is found to be a strong outcome of organisational change that is followed by detrimental changes in organisational commitment among other negative outcomes. However, proper communication during a change seems to curb these negative outcomes (Jimmieson et al., 2004; Nelson, Cooper & Jackson, 1995; Paulsen, Callan, Grice & Rooney, 2005; Rafferty & Griffin, 2006; Schweiger & DeNisi, 1991). As sufficient communication is a part of what generates a healthy change process, it is likely to believe that those employees who perceive the change as healthy, also experience greater organisational commitment than those employees who don't perceive the change in this way. According to the above theory, this

could be an explanatory factor in why a healthy change process seem to reduce turnover intention.

Other explanatory factors are how the planning of the change is perceived and the job insecurity experienced by employees. Once again, the communication flow becomes relevant in explaining the finding. Previous findings suggest that the active deliberation and preparation of the change is negatively related to turnover intention (Rafferty & Griffin, 2006). Planning a large-scale merger is likely to involve a great deal of communication. If employees perceive the change process as healthy, part of this probably relates to them finding the communication flow and the planning of the change as sufficient. The relationship between the planning of the change and turnover intention is also found to be mediated by psychological uncertainty (Rafferty & Griffin, 2006). As explained further up in the discussion, a healthy change process seems to reduce job insecurity. Thus, job insecurity is likely to mediate this relationship. Although this mediating effect was not tested for in this study, it may be an additional explanatory factor in why a healthy change process seem to reduce turnover intention.

A final explanatory factor is connected to the unfolding model of turnover intention (Lee et al., 1996). As previously stated, this model suggests that 'shocks to the system' (high impact changes), which may occur during organisational changes, bring employees toward thinking about leaving their jobs. Thus, it may be that a healthy change process, as captured by sufficient communication, awareness of diversity, management availability, early role clarification and constructive conflicts, may ease the impact the change has on employees, and consequently leading to healthy change processes causing less turnover intention.

Regarding hypothesis 3b, no significant moderation effect was obtained. That is, stress was not found to moderate the relationship between HCPI and turnover intention. Previous studies have found that job stress is associated with an increase in turnover intention (e.g. Arshadi & Damiri, 2013; Yoon & Kim, 2010), although moderation effects have not been previously tested to the authors knowledge. Since stress is the moderator variable used in both hypothesis 1b and 2b, the same buffering effect of a healthy change process may be applied as an explanation here. Namely, that a perceived healthy change process may buffer or reduce the effects of stress to the extent where stress does not moderate the relationship between a healthy change process (HCPI) and turnover intention. The reason behind this may be that through creating a healthy change, job stress is reduced. High job stress has been found to influence job satisfaction, which in turn leads to low performance and an intention to leave

the job (Applebaum, Fowler, Fiedler, Osinubi & Robson, 2010). Research has also found that the higher the amount of stress, the higher the turnover intention among employees will be.

Difference in perceived change healthiness between university colleges

In line with hypothesis 4, a difference in the perceived healthiness of the change was found between employees at the two different university colleges. The t-test showed that employees at the University College of Southeast Norway perceived the change as less healthy than employees at the Western Norway University of Applied Sciences. As previously stated, the latter university college is approximately one year behind the University College of Southeast Norway in terms of the merger. Additionally, these mergers are categorized as planned episodic changes, and this type of change typically affects employees more than continuous changes (Saksvik, 2011). In terms of these mergers then, it may be that the consequences of episodic changes become more visible and impactful further on in the change process. It is also likely that the perceived change healthiness may fluctuate throughout the change. A longitudinal study would be useful to investigate such questions more closely.

This finding may also be explained using Lewin's (1951) original model of organizational change. It may be that employees at the Western Norway University of Applied Sciences is still in the 'unfreeze' phase where motivation for the change is still high, and so employees perceive the change as healthy perhaps before the impact and the consequences of the change has really hit them. Whereas employees at the University college of Southeast Norway may be somewhere in the 'change' phase, where the consequences of the change are affecting the employees to a larger degree than in the 'unfreeze' phase. It may be, that in the 'change' phase, the healthiness of the change deteriorates somewhat. For example, it may be that the management becomes less available due to having more tasks than usual to attain to and consequently communicating less with their employees, which in turn could affect role clarification, awareness of diversity and handling constructive conflicts.

Methodological considerations

The study's design. When using a cross-sectional study, the data is collected in a given population and at a given point in time. This type of study is generally more easily carried out, and less expensive and time consuming than longitudinal studies. However, there are several disadvantages that follows a cross-sectional study. Because the outcome- and predictor variables are measured at the same time, causation cannot be inferred. It is also not possible to

infer reciprocal causation, which refers to cases where A causes B, and B causes A. Thus, one cannot draw any conclusions about which of the variables occur first, how close in time they occur, or if intermediate variables are linking the relationships that are discovered (Skog, 2004). Another weakness with cross-sectional studies is that spurious correlations are present. A certain amount of 'error' is accompanied in the statistical regression models, and it is not possible to control for all possible confounding variables (Field, 2009). Despite the above-mentioned disadvantages, a cross-sectional study was deemed sufficient to answer the study's research question and hypothesis.

The survey. Online surveys are an efficient data collecting technique and allows for distributing the survey to large samples without using too many resources (Hooley, Wellens & Marriott, 2012). In addition, it lets the respondents answer the survey within their own time frame. Online surveys also ensure a certain distance between the respondents and the researcher (Hooley et al., 2012), which can be an advantage in terms of the respondents experience of anonymity, and with answering sensitive questions (Cozby, 2009). Disadvantages with using online surveys are that respondents may refuse to answer the survey due to lack of commitment to it, or that respondents forget to answer it. This can lead to a lower response rate and threaten the study's external validity (Cozby, 2009). The fact that a supervisor or researcher is not present during an online survey may also make it more difficult to clear up misunderstandings, which in turn may affect the measurement validity (Skog, 2004).

The survey consisted of 36 questions in total. Making the survey short by choosing validated short form versions of the instruments was an intentional measure to avoid respondents quitting mid-survey and thus ensuring a decent response rate. A decision to not turn on the function in Select Survey that force respondents to answer all question before moving on in the survey was made. Using that function could have led to more incomplete responses and thus a lower response rate. However, if this function had been used, missing values would not have needed to be taken into account, making the data handling easier

Self-reporting. An advantage with using self-reporting in surveys is that it captures events and attitudes in their natural context (Hellevik, 2011). However, some disadvantages follow. A social desirability bias may occur, where respondents answer according to what they believe other people may find favourable (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). Halo- and horns effects may also arise if participants judge a phenomenon as more positive or negative than it actually is based on other characteristics. For instance, participants may rate how the management behaves during the change based on the management previous

behaviour in a different setting, or rate their subjective health based on their physical health rather than their mental health. In addition, known response styles may be for respondents to completely agree or disagree, or to answer questions in a random way, which can pose a challenge with using self-reporting. Respondents may also take into account what they have answered previously when they move into the next section of questions. This is known as 'carryover' and may result in overestimated correlations (Podsakoff et al., 2003). In this study, it is conceivable that answers relating to questions of the employee's closest manager is affected by the respondents' relation to their manager, a fear of responding in an honest way, or whether or not the employees actually work under some form of management at all. These facts may play a role in why some missing responses were found for the HCPI scale in this study.

The sample. An important factor behind running many statistical analyses is having a sufficient sample size. Here, Green's (1991) suggestion was used. This study's sample size was well above the suggested lower limit. This is an important advantage of this study, because too small sample sizes can lead to a selection bias as well as a less accurate estimation of the population (Mulhern & Greer, 2011). Small sample sizes also increase the possibility of type 2 errors due to low statistical power. Type 2 error occurs when one accepts a null hypothesis that is false, and thus find no effect in a population where there actually is one (Field, 2009). It is likely that the sample size of this study is large enough to avoid type 2 errors.

Although the sample size in this study was well above Green's (1991) limit, it is still difficult to draw certain conclusions about the external validity of the study, i.e. to what degree the sample represents the population. It is likely that this sample at least represents Norwegian, administrative employees within the university college sector that are undergoing organisational changes.

Statistical analyses. The statistical analyses used in this study was chosen based on the research question and hypotheses. Because the HCPI consists of several dimensions it could be discussed whether it should be treated as a latent or a manifest variable. A decision was made to treat HCPI as a manifest variable. If the opposite decision had been made, a different method of analysis, such as for example SEM, would perhaps have been more appropriate (Maslowsky, Jager & Hemken, 2014). With regards to the moderation analysis, there exists several techniques. However, a decision was made to include the moderation/interaction term in the hierarchical multiple regression analysis, using SPSS and centering the variables. The

reasons behind this choice is firstly that it is an established method for carrying out moderation analysis (Jose, 2013), and second that it is a quite straight forward procedure.

Theoretical implications

The relationship between organisational change and job insecurity is well documented (e.g. Greenhalgh & Rosenblatt, 1984; Hellgren et al., 1999). However, previous literature and empirical research have mainly investigated the quantitative aspect of job insecurity, and often in settings where the organisational change involves downsizing. The qualitative aspect of job insecurity has not been given much attention, despite research showing this aspect could be important for employee's attitudes towards work (Hellgren et al., 1999). By investigating the qualitative aspect of job insecurity, where employees are not faced with downsizing, but rather changes that may be perceived as challenging for employees, this study contributes to a focus on fear of losing important aspects of one's job (Røvær, 2016). Because organisational change is increasing in Norwegian work life, it is important to increase the knowledge about what factors contribute to reducing this type of job insecurity as organisations are dependent on the attitudes employees bring into the change.

The study also provides a theoretical contribution to the relationship between organisational change and total sickness. It is well established that organisational change may have detrimental effects on the total sickness/health of employees undergoing change, and that these consequences may differ between employees (e.g. Falkenberg et al., 2013; Ferrie et al., 1998). This study shows that a healthy change process can counteract such detrimental effects, which may provide useful in establishing new theories regarding organisational change, the negative consequences it may bring about and how to prevent such outcomes.

There have been few previous studies investigating organisational change and turnover intention. Perhaps surprising considering how expensive turnover are for many organisations (Skarsgård, 2014). By providing additional evidence for the link between organisational change and turnover intention, this study contributes to expand this field of research. This study also shows that a healthy change process may decrease turnover intention, which can be useful in providing new theories regarding the healthy change process framework.

By showing that a healthy change process is an important area of focus when it comes to reducing qualitative job insecurity, total sickness and turnover intention, this study provides support for the theory behind the healthy change process framework. This increases the knowledge of which factors need to be present in the organisation and the psychosocial work environment during a change to reduce such negative outcomes among employees. Because

this study also investigated the HCPI in relation to variables that have previously not been considered, such as total sickness and turnover intention, it also expands the HCPI's usefulness and broadens the theoretical scope of which the HCPI can be used within.

Practical implications

When research shows that as much as half of all initiated organisational changes fail (Clegg & Walsh, 2004; Kramer et al., 2004), it is clear that more knowledge is needed regarding what constitutes and creates healthy and successful changes. This was also part of the initial goal of the healthy change framework, along with creating practical guidelines for organisations undergoing change (Arbeidstilsynet, 2008; Saksvik et al., 2007). The findings of this study can extend these guidelines because it presents research on a healthy change process being able to decrease negative outcomes that have previously not been studied in relation to the HCPI, such as turnover intention and total sickness.

This study also substantiates the importance of a healthy change process to reduce negative aspects of the psychosocial work environment. Thus, it is likely that studies such as this one may provide useful information for creating interventions that target a healthier change through for example lowering job insecurity, total sickness and turnover intention. Such interventions may also be extendable outside of organisational change situations, for organisations that struggle with the same factors. Findings in this study could also be useful in management training. If management is trained with focus on which factors contribute to a healthy change, it is more likely that these factors are taken into account and actively worked for during a change.

Another area of which this study can contribute to is that of the recruitment process. Organisational change is likely to increase in conjunction with new technologies in the future and in an expanding global market. It could therefore be advantageous to search for employees that exhibit willingness to change and managers that are aware of the diversity of employees' reactions already in the recruitment process (Røvær, 2016). The findings of this study may perhaps also prove useful in developing criteria and questionnaires to be used in such a recruitment process.

Future research

Because planned, episodic changes are not accomplished overnight, it is likely that how the healthiness of the change is experienced will fluctuate throughout the change. It would therefore have been interesting to investigate the current research question more in depth with

a longitudinal study. A longitudinal study would perhaps be suitable to investigate whether factors such as the healthiness of the change, job insecurity, turnover intention and total sickness are experienced differently throughout the change, and whether the type of organisational change can predict the experienced healthiness of the change. A longitudinal study would also perhaps be suitable for expanding more on causality.

As this study investigated organisational changes in the forms of mergers, it would be useful to investigate the same factors in changes involving for example downsizing, where the immediate threats are higher for the employees. It is likely that maintaining the healthiness of such a change would need more resources and effort from both management and employees. It would thus be interesting to see if outcomes such as turnover intention, total sickness and job insecurity would increase in a more 'impactful' change.

Mentioned above is some of the disadvantages with using self-reporting in studies like this one. The social desirability bias and halo- and horns effects are of particular concern. It would thus be compelling to carry out a similar study where rather than self-reporting, responses are based on actual numbers gathered from the organisation. This would be possible for outcomes such as absenteeism and actual turnover for instance. It could perhaps also be possible to investigate whether the healthiness of the change could be measured in a more objective manner, through a type of ethnography workplace study.

The current study examines organisational change within the university college sector. A similar study would also be applicable in different sectors and within other professions to be able to expand on generalisability. It would additionally be interesting to investigate if there is a difference between the private and public sector in outcomes relating to organisational change. Carrying out such studies across different countries and cultures would also be useful to examine whether the same findings and relationships also apply internationally (Røvær, 2016).

Future studies could also choose to examine the dimensions of the HCPI to establish which of these are stronger predictors of the outcome variables used in this study. This could prove useful in establishing targeted interventions and practical guidelines. Investigating sickness absenteeism and sickness presenteeism as separated rather than as combined into total sickness would also give a more nuanced picture of sickness during changes. A future study where the sample is both more substantial, in terms of size, and more nuanced, in terms of the female-male ratio, which for this sample was $N= 80$ and $N= 35$ respectively, would perhaps be helpful in terms of generalisability.

Conclusion

This study has investigated whether a healthy change process may predict qualitative job insecurity, total sickness and turnover intention. The findings show that a healthy change process is related to lower qualitative job insecurity, lower total sickness and less turnover intention among employees. However, no moderating effects were obtained with stress or subjective health for the above relationships. The findings also unveiled that employees who had partaken in the merger the longest, also experienced the change as less healthy.

This study joins previous research and literature on showing the importance of creating and maintaining change environments that are experienced as healthy among employees. This study adds to the literature by providing further evidence on a healthy change process being able to positively impact the negative outcomes that normally follow organisational change. In this case, this refers to qualitative job insecurity, total sickness and turnover intention – all of which would cost an organisation in terms of productivity, money and a deterioration of the psychosocial work environment. The current study additionally expands the usage of the HCPI and validate it as both useful and appropriate to measure the healthiness of change in large scale mergers.

References

- Andersen, G. R. (2006). Conflicts during organizational change: Destructive or constructive? *Nordic Psychology*, 58(3), 215-231. doi: 10.1027/1901-2276.58.3.215
- Applebaum, D., Fowler, S., Fiedler, N., Osinubi, O., & Robson, M. (2010). The impact of environmental factors on nursing stress, job satisfaction, and turnover intention. *The Journal of nursing administration*, 40, 323-328.
- Arbeidstilsynet. (2007). [Norwegian Labour Inspectorate] The working environment act. Oslo: Gyldendal Akadmisk.
- Arbeidstilsynet. (2008). *Omstilling? Har du husket det viktigste?* Retrieved from: <http://www.arbeidstilsynet.no/binfil/download2.php?tid=98946>
- Aronsson, G., & Gustafsson, K. (2005). Sickness presenteeism: Prevalence, attendance-pressure factors, and an outline of a model for research. *Journal of Occupational and Environmental Medicine*, 47(9), 958–966. doi: 10.1097/01.jom.0000177219.75677.17.
- Aronsson, G., Gustafsson, K., & Dallner, M. (2000). Sick but yet at work. An empirical study of sickness presenteeism. *Journal of epidemiology and community health*, 54(7), 502-509. doi: 10.1136/jech.54.7.502.
- Aronsson, G., Gustafsson, K., & Mellner, C. (2011). Sickness presence, sickness absence, and self-reported health and symptoms. *International Journal of Workplace Health Management*, 4(3), 228–234. doi: 10.1108/17538351111172590.
- Arshadi, N., & Damiri, H. (2013). The relationship of job stress with turnover intention and job performance: Moderating role of OBSE. *Procedia-Social and Behavioral Sciences*, 84, 706-710.
- Ashford, S. J., Lee, C., & Bobko, P. (1989). Content, causes, and consequences of job insecurity: A theory-based measure and substantive test. *Academy of Management Journal*, 4, 803–829.
- Bailis, D. S., Segall, A., & Chipperfield, J. G. (2003). Two views of self-rated general health status. *Social science & medicine*, 56(2), 203-217.
- Barnett, V., & Lewis, T. (1974). *Outliers in statistical data*. Chichester: Wiley
- Beale, N. and Nethercott, S. (1988). Certified sickness absence in industrial employees threatened with redundancy. *British Medical Journal of Clinical Research and Education*, 296, 1508–1510.
- Beer, M., & Nohria, N.(2000). Cracking the code of change. *Harvard Business Review*, 78, 133–141.

- Bergström, G., Bodin, L., Hagberg, J., Aronsson, G., & Josephson, M. (2009). Sickness presenteeism today, sickness absenteeism tomorrow? A prospective study on sickness presenteeism and future sickness absenteeism. *Journal of Occupational and Environmental Medicine, 51*(6), 629–638. doi: 10.1097/JOM.0b013e3181a8281b.
- Blau, G. (2003). Testing for a four-dimensional structure of occupational commitment. *Journal of Occupational and Organizational Psychology, 76*, 469–488.
- Bordia, P., Hobman, E., Jones, E., Gallois, C., & Callan, V. (2004). Uncertainty during organizational change: Types, consequences, and management strategies. *Journal of Business and Psychology, 18*, 507–532.
- Buchanan, D. A. & Storey, J. (1997). Role-taking and role-switching in organizational change: the four pluralities. In McLoughlin, I. & Harris, M. (Eds.), *Innovation, Organizational Change and Technology* (pp. 127-145). London: International Thompson.
- Burke, W. W. (2014). *Organization change: Theory and practice*. California, USA: Sage Publications.
- Burnes, B. (2000). *Managing Change* (3rd ed.). Harlow: FT/Pearson Educational
- Cammann, C., Fichman, M., Jenkins, D., & Klesh, J. (1979). The Michigan organizational assessment questionnaire. Unpublished manuscript, University of Michigan, Ann Arbor.
- Caverley, N., Cunningham, J. B., & MacGregor, J. N. (2007). Sickness presenteeism, sickness absenteeism, and health following restructuring in a public service organization. *Journal of Management Studies, 44*(2), 304-319.
- Ceniceros, R. (2001). Presenteeism lowers productivity. *Business Insurance, 35*(26), 29.
- Cheng, G. H., & Chan, D. K. (2008). Who suffers more from job insecurity? A meta-analytic review. *Applied Psychology, 57*(2), 272-303. doi: 10.1111/j.1464-0597.2007.00312.x
- Claes, R. (2011). Employee correlates of sickness presence: A study across four European countries. *Work and Stress, 25*(3), 224–242. doi: 10.1080/02678373.2011.605602.
- Clegg, C., & Walsh, S. (2004). Change management: Time for a change. *European Journal of Work and Organizational Psychology, 13*(2), 217–239
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, N. J: Laurence Erlbaum
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of health and social behavior, 24*(4), 385-396.

- Cohen, S., & Williamson, G. (1988). Perceived stress in a probability sample of the US. In S. Spacapan & S. Oskamp (Eds.), *The social psychology of health: Claremont symposium on applied social psychology* (pp. 31–67). Newbury park, CA: Sage publications.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological bulletin*, *98*(2), 310-357.
- Cole, M. A., & Neumayer, E. (2006). The impact of poor health on total factor productivity. *Journal of Development Studies*, *42*(6), 918-938.
- Cooper, C. L., Dewe, P. J., & O'Driscoll, M. P. (2001). *Organizational stress: A review and critique of theory, research, and applications*. London: Sage Publications.
- Cozby, P. C. (2009). *Methods in behavioral research*. Fullerton: McGraw-Hill.
- Dawson, P. (1994). *Organizational Change: A Processual Approach*. London: Paul Chapman Publishing.
- Dawson, P. (2003). *Reshaping change: A processual perspective*. London: Routledge.
- De Witte, H., De Cuyper, N., Handaja, Y., Sverke, M., Näswall, K., & Hellgren, J. (2010). Associations between quantitative and qualitative job insecurity and well-being: A test in Belgian banks. *International Studies of Management & Organization*, *40*(1), 40-56. doi: 10.2753/IMO0020-8825400103
- De Witte, H., De Cuyper, N., Vander Elst, T., Vanbelle, E., & Niesena, W. (2012). Job insecurity: Review of the literature and a summary of recent studies from Belgium. *Romanian Journal of Applied Psychology*, *14*(1), 11-17. Retrieved from: http://www.rjap.psihologietm.ro/Download/rjap141_2.pdf
- De Witte, H., Vander Elst, T., & De Cuyper, N. (2015). Job insecurity, health and well-being. In J. Vuori, R. Blonk & R. H. Price (Eds.), *Sustainable working lives: Managing work transitions and health throughout the life course* (pp. 109-128). Nederland: Springer.
- Elstad, J. I., & Vabø, M. (2008). Job stress, sickness absence and sickness presenteeism in Nordic elderly care. *Scandinavian Journal of Public Health*, *36*(5), 467-474.
- Falkenberg, H., Fransson, E. I., Westerlund, H., & Head, J. A. (2013). Short-and long-term effects of major organisational change on minor psychiatric disorder and self-rated health: results from the Whitehall II study. *Occupational and environmental medicine*, *70*(10), 688-696.
- Ferrie, J. E., Shipley, M. J., Marmot, M. G., Stansfeld, S., & Smith, G. D. (1998). The health effects of major organisational change and job insecurity. *Social science & medicine*, *46*(2), 243-254.
- Field, A. (2009). *Discovering statistics using SPSS*. London: Sage Publications

- Finne, L. B., Christensen, J. O., & Knardahl, S. (2014). Psychological and social work factors as predictors of mental distress: a prospective study. *PloS one*, *9*(7), e102514.
- Furnham, A. (1997). *The psychology of behavior at work. The individual in the organization*. New York, NY: Psychology Press.
- Goetzel, R. Z., Long, S. R., Ozminkowski, R. J., Hawkins, K., Wang, S. and Lynch, W. (2004). Health, absence, disability and presenteeism cost estimates of certain physical and mental health conditions affecting U.S. employers. *Journal of Occupational and Environmental Medicine*, *46*, 398–412.
- Gosselin, E., Lemyre, L., & Corneil, W. (2013). Presenteeism and absenteeism: differentiated understanding of related phenomena. *Journal of occupational health psychology*, *18*(1), 75–86. doi: 10.1037/a0030932.
- Green, S. B. (1991). How many subjects does it take to do a regression analysis. *Multivariate behavioral research*, *26*(3), 499-510.
- Greenhalgh, L., & Rosenblatt, Z. (1984). Job insecurity: Toward conceptual clarity. *Academy of Management Review*, *9*(3), 438-448. doi: 10.1037/1076-8998.7.3.242
- Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of management*, *26*(3), 463-488.
- Gustafsson, K., & Marklund, S. (2011). Consequences of sickness presence and sickness absence on health and work ability: a Swedish prospective cohort study. *International journal of occupational medicine and environmental health*, *24*(2), 153-165.
- Gustafsson, K., & Marklund, S. (2014). Associations between health and combinations of sickness presence and absence. *Occupational Medicine*, *64*(1), 49-55.
- Hackett, R. D., Bycio, P., & Guion, R. M. (1989). Absenteeism among hospital nurses: An idiographic-longitudinal analysis. *Academy of Management Journal*, *32*(2), 424-453.
- Hansen, C. D., & Andersen, J. H. (2008). Going ill to work – What personal circumstances, attitudes and work-related factors are associated with sickness presenteeism? *Social Science & Medicine*, *67*(6), 956-964. doi: 10.1016/j.socscimed.2008.05.022.
- Hansen, C. D., & Andersen, J. H. (2009). Sick at work-a risk factor for long-term sickness absence at a later date? *Journal of Epidemiology and Community Health*, *63*(5), 397-402. doi: 10.1136/jech.2008.078238.
- Hansson, A. S., Vingård, E., Arnetz, B. B., & Anderzén, I. (2008). Organizational change, health, and sick leave among health care employees: A longitudinal study measuring stress markers, individual, and work site factors. *Work & Stress*, *22*(1), 69-80.

- Hartley, J., Jacobson, D., Klandermans, B., & van Vuuren, T. (1991). *Job insecurity: Coping with jobs at risk*. London: Sage
- Hartley, J., & Klandermans, P.G. (1986). Individual and collective responses to job insecurity. In G. Debus & H.-W. Schroiff (Eds.), *The psychology of work and organization* (pp. 129–136). Amsterdam: Elsevier Science.
- Hellevik, O. (2011): *Mål og mening. Om feiltolking av meningsmålinger*. Oslo: Universitetsforlaget.
- Hellgren, J., Sverke, M., & Isaksson, K. (1999). A two-dimensional approach to job insecurity: Consequences for employee attitudes and well-being. *European Journal of Work and Organizational Psychology*, 8(2), 179-195.
- Hilsen, A. I., Steinum, T., & Gjerberg, E. (2004). *Utredning om omstilling*. AFI-notat, 3. Oslo: Arbeidsforskningsinstituttet.
- Hiscock, J. (2001, November 01). The top 10 causes of absenteeism and what you can do about it. *HR Magazine*. Retrieved from: <http://www.hrmagazine.co.uk/article-details/the-top-10-causes-of-absenteeism-and-what-you-can-do-about-it>.
- Hooley, T., Wellens, J., & Marriott, J. (2012). *What is online research?: Using the internet for social science research*. USA: Bloomsbury Academic.
- Isaksson, K., Pettersson, P., & Hellgren, J. (1998). Utvecklingscentrum: en verksamhet för uppsagda tjänstemän i KF. [Development centre: an activity for downsized salaried employees]. *Arbetsmarknad and Arbetsliv*, 4, 22-43.
- Jehn, K. A. (1995). A multimethod examination of the benefits and detriments of intragroup conflict. *Administrative Science Quarterly*, 40(2), 256-282. doi: 10.2307/2393638
- Jick, T. D., & Greenhalgh, L. (1981). Information processing of new recruits in a declining organization. In Annual Meeting of the Academy of Management, San Diego.
- Jimmieson, N. L., Terry, D. J., & Callan, V. J. (2004). A longitudinal study of employee adaptation to organizational change: The role of change-related information and change-related self-efficacy. *Journal of Occupational Health Psychology*, 9(1), 11-27. doi: 10.1037/1076-8998.9.1.11
- Johannessen, H. A., Tynes, T., & Sterud, T. (2013). Effects of occupational role conflict and emotional demands on subsequent psychological distress: a 3-year follow-up study of the general working population in Norway. *Journal of occupational and environmental medicine*, 55(6), 605-613.
- Johns, G. (2010). Presenteeism in the workplace: A review and research agenda. *Journal of Organizational Behavior*, 31(4), 519-542.

- Jose, P. E. (2013). ModGraph-I: A programme to compute cell means for the graphical display of moderational analyses: The internet version, Version 3.0. Victoria University of Wellington, Wellington, New Zealand. Retrieved from:
<http://pavlov.psyc.vuw.ac.nz/paul-jose/modgraph/>
- Kanter, R. M., Stein, B. A. and Jick, T. D. (1992). *The Challenge of Organizational Change*. New York: Free Press.
- Keim, A. C., Landis, R. S., Pierce, C. A., & Earnest, D. R. (2014). Why do employees worry about their jobs? A meta-analytic review of predictors of job insecurity. *Journal of Occupational Health Psychology, 19*(3), 269-290. doi: 10.1037/a0036743
- Keith, T. Z. (2015). *Multiple regression and beyond: An introduction to multiple regression and structural equation modeling*. New York: Routledge.
- King, J. E. (2000). White-collar reactions to job insecurity and the role of the psychological contract: Implications for human resource management. *Human Resource Management, 39*(1), 79-92.
- Kivimäki, M., Head, J., Ferrie, J. E., Hemingway, H., Shipley, M. J., Vahtera, J., & Marmot, M. G. (2005). Working while ill as a risk factor for serious coronary events: the Whitehall II study. *American journal of public health, 95*(1), 98-102.
- Kivimäki, M., Vahtera, J., Elovainio, M., Pentti, J., & Virtanen, M. (2003). Human costs of organizational downsizing. Comparing health trends between leavers and stayers. *American Journal of Community Psychology, 32*, 57-67.
- Kivimäki, M., Vahtera, J., Pentti, J., & Ferrie, J.E. (2000). Factors underlying the effect of organisational downsizing on health of employees: A longitudinal cohort study. *BMJ, 320*, 971-975.
- Knutsson, A. and Goine, H. (1998). Occupation and unemployment rates as predictors of long term sickness absence in two Swedish counties. *Social Science Medicine, 47*, 25–31.
- Korunka, C., Scharitzer, D., Carayon, P., & Sainfort, F. (2003). Employee strain and job satisfaction related to an implementation of quality in a public service organization: a longitudinal study. *Work & Stress, 17*, 52-72.
- Kramer, M. W., Dougherty, D. S., & Pierce, T. A. (2004). Managing uncertainty during a corporate acquisition. *Human communication research, 30*(1), 71-101.
- Lausten, E. & Solem, L. K. (2016, October 03). Jo færre oppgaver, desto mer misnøye. *Dagens Næringsliv*. Retrieved from:
<http://www.dn.no/karriere/2016/10/02/1551/Livsstil/jo-faerre-oppgaver-desto-mer-misnoye>

- Lazarus, R. S. (1966). *Psychological stress and the coping process*. New York: McGraw Hill
- Lazarus, R. S. (1990). Theory-based stress measurement. *Psychological inquiry*, 1(1), 3-13.
- Lazarus, R. S. (1995). Psychological stress in the workplace. In R. Crandall & P.L. Perrewè (Eds.), *Occupational stress: A handbook* (pp. 3-14). Washington, DC: Taylor & Francis.
- Leineweber, C., Westerlund, H., Hagberg, J., Svedberg, P., Luukkala, M., & Alexanderson, K. (2011). Sickness presenteeism among Swedish police officers. *Journal of Occupational Rehabilitation*, 21(1), 17–22. doi: 10.1007/s10926-010-9249-1.
- Lewin, K. (1951). *Field theory in social science*. New York, NY: Harper.
- Lewin, K., & Cartwright, D. (1951). *Field theory in social science: Selected theoretical papers*. New York: Harper & Brothers.
- Lewis, S. and Cooper, C. L. (1996). Balancing the work family interface: a European perspective. *Human Resource Management Review*, 5, 289-305.
- Lowe, G. (2002). Here in body, absent in productivity: Presenteeism hurts output, quality of work-life and employee health. *Canadian HR Reporter: The National Journal of Human Resource Management*, 2(1), 1-2.
- Maslowsky, J., Jager, J., & Hemken, D. (2014). Estimating and interpreting latent variable interactions: A tutorial for applying the latent moderated structural equations method. *International Journal of Behavioral Development*, 23(1), 1-10. doi: 10.1177/0165025414552301
- Mobley, W. H., Horner, S. O., & Hollingsworth, A. T. (1978). An evaluation of precursors of hospital employee turnover. *Journal of Applied psychology*, 63(4), 408-414.
- Mulhern, G., & Greer, B. (2011). *Making sense of data and statistics in psychology*. New York: Palgrave Macmillan.
- Mæland, J. G. (2009) *Hva er helse?*. Oslo: Universitetsforlaget.
- NAV (2016). *Utviklingen i sykefraværet, 3. Kvartal 2016*. Retrieved from: <file:///C:/Users/aashi/Downloads/Sykefrav%C3%A6rsnotat%20-%203.%20kvartal%202016.pdf>
- Nguyen, H., & Kleiner, B. H. (2003). The effective management of mergers. *Leadership & Organizational Development Journal*, 24(8), 447–454.
- NHO (2016). *Remix – det nye arbeidslivet*. Retrieved from: <https://www.nho.no/arskonferanser/remix/forside/tema/>
- Noel, D. (1998). Layoff survivor sickness: What it is and what to do about it. In M.K. Gowing, J.D. Kraft & J.C. Quick (Eds.), *The new organizational reality: downsizing,*

- restructuring and revitalization* (pp.207-220). Washington, DC: American Psychology Association.
- Nytrø, K., Saksvik, P. Ø., Mikkelsen, A., Bohle, P., & Quinlan, M. (2000). An appraisal of key factors in the implementation of occupational stress interventions. *Work & Stress, 13*, 213–225.
- Pallant, J. (2013). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. Maidenhead: McGraw-Hill.
- Parker, S. K., Axtell, C. M., & Turner, N. (2001). Designing a safer workplace: Importance of job autonomy, communication quality, and supportive supervisors. *Journal of Occupational Health Psychology, 6*(3), 211-228. doi: 10.1037/1076-8998.6.3.211
- Paulsen, N., Callan, V., Grice, T., & Rooney D. (2005). Job uncertainty and personal control during downsizing: A comparison of survivors and victims. *Human Relations, 58*, 463–496.
- Pettigrew, A. M. (1990a). Longitudinal field research on change: theory and practice. *Organizational Science, 3*(1), 267–92.
- Pettigrew, A. M. (1990b). Studying strategic choice and strategic change. *Organizational Studies, 11*(1), 6–11.
- Pettigrew, A. M. (1997). What is a processual analysis?. *Scandinavian Journal of Management, 13*(40), 337–348
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903. doi: 10.1037/0021-9010.88.5.879
- Probst, T. M. (2002). The impact of job insecurity on employee work attitudes, job adaptation, and organizational withdrawal behaviors. In J.M. Brett & F. Drasgow (Eds.), *The psychology of work: Theoretically based empirical research* (pp. 141-168). New York: Psychology Press.
- Proctor, T., & Dukakis, I. (2003). Change management: The role of internal communication and employee development. *Corporate Communications, 8*, 268–276.
- Rafferty, A. E., & Griffin, M. A. (2006). Perceptions of organizational change: a stress and coping perspective. *Journal of Applied Psychology, 91*(5), 1154.
- Roskies, E., & Louis-Guerin, C. (1990). Job insecurity in managers: Antecedents and consequences. *Journal of Organizational Behavior, 11*, 345–359.

- Rostad, I. S., Milch, V., & Saksvik, P. Ø. (2015). Psychosocial workplace factors associated with sickness presenteeism, sickness absenteeism, and long-term health in a Norwegian industrial company. *Scandinavian Psychologist*, 2, 1-18.
- Royston, P., Altman, D. G., & Sauerbrei, W. (2006). Dichotomizing continuous predictors in multiple regression: a bad idea. *Statistics in medicine*, 25(1), 127-141.
- Røed, K., & Fevang, E. (2007). Organizational change, absenteeism, and welfare dependency. *Journal of Human Resources*, 42(1), 156-193.
- Røvær, T. (2016). *Jobbsikkerhet og endringsprosesser: en studie av endringens betydning for den enkelte ansatte, endringsprosessens sunnhet og individuell endringsmestring* (Master thesis). Retrieved from: <http://hdl.handle.net/11250/2399576>
- Saksvik, P. Ø. (1996). Attendance pressure during organizational change. *International Journal of Stress Management*, 3, 47-59.
- Saksvik, P. Ø. (2011). Å leve med omstilling. In S. Einarsen & A. Skogstad (Eds.), *Det gode arbeidsmiljø: Krav og utfordringer* (pp. 199-219). Bergen: Fagbokforlaget Vigmostad & Bjørke AS.
- Saksvik, P. Ø., Nytrø, K., & Tvedt, S. D. (2008). Sunn endring i organisasjoner. *Tidsskrift for Norsk Psykologforening*, 45(3), 295-300.
- Saksvik, P. Ø., Tvedt, S. D., Nytrø, K., Andersen, G. R., Andersen, T. K., Buvik, M. P., & Torvatn, H. (2007). Developing criteria for healthy organizational change. *Work & Stress*, 21(3), 243-263. doi: 10.1080/02678370701685707
- Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational behavior*, 30(7), 893-917.
- Schweiger, D. M., & Denisi, A. S. (1991). Communication with employees following a merger: A longitudinal field experiment. *Academy of Management Journal*, 34(1), 110-135. doi: 10.2307/256304
- Skarsgård, M. L. (2014, May 21). Så mye koster det å erstatte en medarbeider. *Hegnar*. Retrieved from: <http://www.hegnar.no/Nyheter/Personlig-oekonomi/2014/05/Saa-mye-koster-det-aa-erstatte-en-medarbeider>
- Skog, O. J. (2004). *Å forklare sosiale fenomener: En regresjonsbasert tilnærming*. Oslo: Gyldendal Norsk Forlag AS.
- Stamina (2016). *Norsk Jobbhelse rapport 2016*. Retrieved from: <https://www.staminagroup.no/bedriftshelsetjeneste/norsk-jobbhelse-2016/>

- Stansfeld, S., & Candy, B. (2006). Psychosocial work environment and mental health—a meta-analytic review. *Scandinavian journal of work, environment & health*, 32(6), 443-462.
- Steers, R. M., & Rhodes, S. R. (1978). Major influences on employee attendance: A process model. *Journal of Applied psychology*, 63(4), 391-407.
- Sverke, M., & Hellgren, J. (2002). The nature of job insecurity: Understanding employment uncertainty on the brink of a new millennium. *Applied Psychology*, 51(1), 23-42.
- Sverke, M., Hellgren, J., & Näswall, K. (2006). *Job insecurity: A literature review*. (Report No. 1). Sweden: Arbetslivsinstitutet
- Tabachnick, B. G., & Fidell, L. S. (2014). *Using multivariate statistics*. USA: Pearson.
- Terry, D. J., Nielsen, M., & Perchard, L. (1993). Effects of work stress on psychological well-being and job satisfaction: The stress-buffering role of social support. *Australian Journal of Psychology*, 45(3), 168-175.
- Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: path analyses based on meta-analytic findings. *Personnel psychology*, 46(2), 259-293.
- The Telegraph (2011, October 05). Top 10 causes of absenteeism. *The Telegraph*. Retrieved from: <http://www.telegraph.co.uk/finance/jobs/8806388/Top-10-causes-of-absenteeism.html>
- Tvedt, S. D. (2013). Exploring healthy organizational change processes: Criteria, consequences, limitations, and causality. (Doctoral dissertation). Retrieved from: <https://brage.bibsys.no/xmlui/handle/11250/271150>
- Tvedt, S. D., Saksvik, P. Ø., & Nytrø, K. (2009). Does change process healthiness reduce the negative effects of organizational change on the psychosocial work environment? *Work & Stress*, 23(1), 80-98. doi: 10.1080/02678370902857113
- Vander Elst, T., Näswall, K., Bernhard-Oettel, C., De Witte, H., & Sverke, M. (2016). The effect of job insecurity on employee health complaints: A within-person analysis of the explanatory role of threats to the manifest and latent benefits of work. *Journal of Occupational Health Psychology*, 21(1), 65-76. doi: 10.1037/a0039140
- Virtanen, P. (1994). An epidemic of good health at the workplace. *Social Health Illness*, 16, 394-401.
- Virtanen, M., Kivimäki, M., Elovainio, M., Vahtera, J., & Ferrie, J. E. (2003). From insecure to secure employment: changes in work, health, health related behaviours, and sickness absence. *Occupational and environmental medicine*, 60(12), 948-953.

- Weick, K. E., & Quinn, R. E. (1999). Organizational change and development. *Annual Review of Psychology*, 50(1), 361-386. doi: 10.1146/annurev.psych.50.1.361
- WHO (2006). *Constitution of the World Health Organization*. Retrieved from:
http://www.who.int/governance/eb/who_constitution_en.pdf
- WHO (n.d.). *The determinants of health*. Retrieved from:
<http://www.who.int/hia/evidence/doh/en/>
- Wilson, D. C. (1992). *A Strategy of Change*. London: Routledge
- Worrall, L., & Cooper, C. L. (1998). *Quality of working life: 1998 survey of managers' changing experiences*. London: Institute of Management.
- Yoon, G. S., & Kim, S. Y. (2010). Influences of job stress and burnout on turnover intention of nurses. *Journal of Korean Academy of Nursing Administration*, 16(4), 507-516.
- Zhang, W., Bansback, N., & Anis, A. H. (2011). Measuring and valuing productivity loss due to poor health: a critical review. *Social science & medicine*, 72(2), 185-192.

Appendices

Appendix A – Approval of NSD application

Per Øystein Saksvik
 Psykologisk institutt NTNU



7491 TRONDHEIM

Vår dato: 26.10.2016

Vår ref: 49880 / 3 / HJP

Deres dato:

Deres ref:

TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 09.09.2016. All nødvendig informasjon om prosjektet forelå i sin helhet 21.10.2016. Meldingen gjelder prosjektet:

49880 The relevance of the HCPI in explaining absenteeism, presenteeism, turnover intention, job insecurity, stress and subjective health.

Behandlingsansvarlig NTNU, ved institusjonens øverste leder

Daglig ansvarlig Per Øystein Saksvik

Student Åshild Bødal

Personvernombudet har vurdert prosjektet, og finner at behandlingen av personopplysninger vil være regulert av § 7-27 i personopplysningsforskriften. Personvernombudet tilrår at prosjektet gjennomføres.

Personvernombudets tilråding forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, ombudets kommentarer samt personopplysningsloven og helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Dokumentet er elektronisk produsert og godkjent ved NSDs rutiner for elektronisk godkjenning.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering.

Endringsmeldinger gis via et eget skjema,

<http://www.nsd.uib.no/personvern/meldeplikt/skjema.html>. Det skal også gis melding

etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database,

<http://pvo.nsd.no/prosjekt>.

Personvernombudet vil ved prosjektets avslutning, 01.06.2017, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen

Kjersti Haugstvedt

Hanne Johansen-Pekovic

Kontaktperson: Hanne Johansen-Pekovic tlf: 55 58 31 18

Vedlegg: Prosjektvurdering

Appendix B – Information respondents received by email through contact persons

Hei,

Du er invitert til å delta i en spørreundersøkelse som undersøker omstillingsprosessen (fusjonen) ved din virksomhet. Spørsmålene vil blant annet omhandle kjennetegn ved omstillingsprosessen og din opplevelse av ulike sider ved egen arbeidssituasjon og arbeidsmiljø under omstillingsprosessen.

Studien gjennomføres av masterstudenten ved arbeids- og organisasjonspsykologi ved NTNU, Åshild Bødal med veiledning fra professor Per Øystein Saksvik. Spørreskjemaet er konfidensielt og deltakelse er frivillig. Utfylling av spørreskjemaet vil ta ca. 5-10 minutter.

Datamaterialet vil bli fullstendig anonymisert ved prosjektslutt, senest utgangen av juni 2017.

Jeg håper med dette at du vil delta for å øke kunnskap om innføring av endringsprosesser i norsk arbeidsliv. Jeg er svært takknemlig for din deltakelse, da jeg er avhengig av frivillige respondenter for å kunne skrive min masteroppgave. "

Mvh.

Åshild Bødal

Appendix C- The survey



Spørreskjema om endring og omstilling

Side 1 av 5

Du er invitert til å delta i denne spørreundersøkelsen om omstillingsprosessen ved din virksomhet. Spørsmålene handler bl.a. om kjennetegn ved omstillingsprosessen, sykefravær, sykenærvær, jobbusikkerhet, og din opplevelse av ulike sider ved din egen arbeidssituasjon og arbeidsmiljøet under omstillingsprosessen. Vi ønsker at du besvarer spørreskjemaet én gang i løpet av november eller desember. Du svarer på vegne av deg selv slik du selv oppfatter situasjonen.

Undersøkelsen gjennomføres av mastergradsstudent Åshild Bødal ved arbeids- og organisasjonspsykologi, Psykologisk institutt, NTNU, under veiledning av professor Per Øystein Saksvik. Spørreskjemaet er konfidensielt, og det er frivillig å delta. Det tar ca. 5-10 minutter å svare.

Alle svar behandles konfidensielt, og datamaterialet vil bli fullstendig anonymisert ved prosjektslutt, senest ved utgangen av juni 2017. De demografiske variablene (stillingstype, alder, kjønn) vil ikke bli presentert i oppgaven på en måte som gjør at enkeltpersoner kan identifiseres. Prosjektet er meldt til Personvernombudet for forskning, Norsk senter for forskningsdata AS (NSD). Vi håper at du vil delta og derved bidra til å øke kunnskapen om endringsprosesser i norsk arbeidsliv. Jeg er svært takknemlig for din deltakelse, da jeg er avhengig av frivillige respondenter for å kunne skrive min masteroppgave.

Kontaktinformasjon: Åshild Bødal, tlf.: 486 02 401, e-post: aashilbo@stud.ntnu.no.

Vennligst besvar spørsmålene i én økt. Bryter du av underveis, må du starte på nytt.

Neste

Side 2 av 5

Bakgrunnsopplysninger

Vi starter med noen bakgrunns spørsmål om deg og din stilling.

1. Kjønn

- Kvinne
 Mann

2. Alder

- 18-30
 30-50
 50+

3. Type stilling

- Leder
 Mellomleder
 Ansatt

4. Hvilken høgskole er du ansatt ved?

- Høgskolen i Sørøst-Norge
 Høgskulen på Vestlandet

5. Har du personalansvar?

- Ja
 Nei

Tilbake

Neste

Denne virksomheten gjennomgår en del endringer i forbindelse med større omstillingsprosesser. Under og på de neste sidene følger en del spørsmål rundt omstillingen, din oppfatning av den og andre aspekter som kan bli påvirket av denne. Her er jeg interessert i din subjektive mening.

6. Her er noen spørsmål om din organisasjon.

I denne endringen føler jeg at...

	Helt uenig	1	2	3	4	Helt enig
Vi har en åpen diskusjon om hvilke tradisjoner eller gjøremål vi vil endre og hvilke vi vil beholde	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ledelsen har tatt hensyn til at folk reagerer forskjellig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ledelsen har prøvd å få fram alle syn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg har hatt anledning til å snakke med min nærmeste leder om konsekvenser for meg	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Min nærmeste leder vet ikke noe mer enn meg om konsekvenser for meg	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Min nærmeste leder er så travelt at det er vanskelig å få en prat på tomannshånd	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Min nærmeste leder vegrer seg for å ta opp vanskelige spørsmål om konsekvenser for den enkelte	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ulike ansvarsområder og oppgaver blir raskt avklart	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Man vet som oftest hvem som har ansvar for forskjellige oppgaver.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg har fått nødvendig opplæring i forhold til nye arbeidsoppgaver og roller.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ledelsen inviterer til dialog, men de hører ikke på oss	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg ser ingen vits i å diskutere med ledelsen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Det føles ikke trygt å komme med kritikk overfor ledelsen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Tilbake](#)
[Neste](#)

7. I hvilken grad er du enig i følgende påstander vedrørende din jobb?

	Helt uenig	1	2	3	4	Helt enig
Jeg syns mine framtidsutsikter innen organisasjonen er gode	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mine muligheter for å finne nye og utviklende arbeidsoppgaver innen organisasjonen er gode	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg tror at organisasjonen kommer til å trenge min kompetanse også i fremtiden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Den lønnsutviklingen jeg kan se fram mot i organisasjonen er lovende	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Hvor enig eller uenig er du i følgende utsagn?

	Helt uenig	1	2	3	4	Helt enig
Jeg tenker ofte på å forlate denne virksomheten	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Det er stor sannsynlighet for at jeg vil lette etter en ny jobb til neste år	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hvis jeg kunne velge igjen, ville jeg valgt å jobbe for denne virksomheten	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[Tilbake](#)
[Neste](#)

**9. Her blir du spurt om dine følelser og tanker i løpet av den siste måneden.
I løpet av den siste måneden, hvor ofte har du ...**

	Aldri	Nesten aldri	Noen ganger	Ganske ofte	Svært ofte
følt at du ikke var i stand til å kontrollere viktige ting i livet ditt?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
følt deg trygg på din evne til å håndtere personlige problemer?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
følt at ting har gått din vei?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
følt at vanskeligheter har hopet seg opp så mye at du ikke kunne håndtere dem?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. I løpet av de siste 12 mnd, hvor ofte har du gått på jobb selv om du burde hatt sykefravær?

- Ingen
- Én gang
- 2-5 ganger
- Mer enn fem ganger

11. Hvor mange dager har du vært borte de siste 12 mnd på grunn av sykefravær?

- Ingen
- 5 dager eller mindre
- 6-10 dager
- 11-23 dager
- 24 dager eller mer

12. Hvordan vil du karakterisere din egen helse for tiden?

- Svært god
- God
- Ikke så god
- Dårlig

Det var det hele!
Vennligst klikk på «Ferdig» for å sende inn svarene dine
og samtykke i å delta i undersøkelsen.

[Tilbake](#)[Ferdig](#)

Appendix D – Overview of the scales and items used in the survey

Variable	Scale/item
Healthy change process	Healthy Change Process Index, HCPI. Tvedt et al. (2009).
Qualitative job insecurity	Isaksson, Petterson & Hellgren (1998), shown in Hellgren, Sverke & Isaksson (1999)
Turnover intention	Cammann, Fichman, Jenkins, and Klesh (1979).
Stress	Perceived Stress Scale, PSS4. Cohen & Williamson, 1988
Sickness absenteeism	Gustafsson & Marklund (2011; 2014)
Sickness presenteeism	Aronsson, Gustafsson and Dallner (2000)
Subjective health	Bailis, Segall & Chipperfield (2003)

Appendix E – Items used to measure the healthiness of the change

Scale: Healthy change process index (HCPI)
Bevissthet om mangfold Vi har åpen diskusjon om hvilke tradisjoner eller gjøremål vi vil endre og hvilke vi vil beholde Ledelsen har tatt hensyn til at folk reagerer forskjellig Ledelsen har prøvd å få fram alle syn
Tilgjengelig ledelse Jeg har hatt anledning til å snakke med min nærmeste leder om konsekvenser for meg Min nærmeste leder er så travel at det er vanskelig å få en prat på tomannshånd Min nærmeste leder vegrer seg for å ta opp vanskelige spørsmål om konsekvenser for den enkelte
Tidlig rolleavklaring Ulike ansvarsområder og oppgaver blir raskt avklart Man vet som oftest hvem som har ansvar for forskjellige oppgaver Jeg har fått nødvendig opplæring i forhold til nye arbeidsoppgaver og roller
Konstruktiv konflikthåndtering Ledelsen inviterer til dialog, men de hører ikke på oss Jeg ser ingen vits i å diskutere med ledelsen Det føles ikke trygt å komme med kritikk overfor ledelsen

Appendix F – Items used to measure qualitative job insecurity

Scale: Qualitative job insecurity
Jeg synes mine framtidsutsikter innen organisasjonen er gode Mine muligheter for å finne nye og utviklende arbeidsoppgaver innen organisasjonen er gode Jeg tror organisasjonen kommer til å trenge min kompetanse også i fremtiden Den lønnsutviklingen jeg kan se fram mot i organisasjonen er lovende

Appendix G – Item used to measure sickness absenteeism

Item: Sickness absenteeism

Hvor mange ganger har du vært borte de siste 12 mnd. på grunn av sykefravær

Appendix H – Item used to measure sickness presenteeism

Item: Sickness presenteeism

I løpet av de siste 12 månedene, hvor ofte har du gått på jobb selv om du burde hatt sykefravær

Appendix I – Items used to measure turnover intention

Scale: Turnover intention

Jeg tenker ofte på å forlate denne virksomheten

Det er stor sannsynlighet for at jeg vil lete etter ny til neste år

Hvis jeg kunne velge igjen, ville jeg valgt å jobbe for denne virksomheten

Appendix J – Items used to measure stress

Scale: Perceived Stress Scale, PSS 4

I løpet av den siste måneden, hvor ofte har du følt at du ikke var i stand til å kontrollere viktige ting i livet ditt

I løpet av den siste måneden, hvor ofte har du følt at ting har gått din vei

I løpet av den siste måneden, hvor ofte har du følt at vanskeligheter har hopet seg opp så mye at du ikke kunne håndtere dem

Appendix K – Item used to measure subjective health

Item: Subjective health

Hvordan vil du karakterisere din egen helse for tiden
