Well-being and work conditions of hospital employees in Iceland and Sweden: a cross-cultural comparison of job-demands, job resources, self-efficacy and intention to quit

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The aim of this study was to examine and compare job demand and resource perception of hospital employees in Iceland and Sweden as well as their self-efficacy and intention to quit. These variables have high predictability for attitudes and behavior. Since the two countries were impacted differently by the global financial crisis of 2008, it is interesting to investigate whether these factors differ between them. A cross-sectional data was collected in public hospitals among specialized and unspecialized healthcare employees who responded to a self-administrated questionnaire. Quantitative methodology was used to analyze the differences between the groups. A MANOVA revealed no significant differences in resource perception, self-efficacy and intention to quit. However, unexpectedly, perception of job demands was significantly higher in Sweden. The literature behind this comparison sheds a light on how work conditions and employee well-being can be improved by managing resources and demands. It yields insight into how improvements can be wrought in such a complex system as healthcare in times of financial restrictions. On a practical level, this study emphasizes the importance of fair demands and good resources as a key to well-being because balanced levels of these factors enable employees to respond effectively to their work environment, be more satisfied, motivated, have high self-efficacy and be less likely to quit their jobs. Finally, areas were identified where future research is needed.
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This study is about the well-being of hospital employees and explores one basic research question: is there a difference in perception of job characteristics and attitudes of workers in public hospitals in Iceland and Sweden? The quality of work conditions is quantified in terms of characteristics of the work environment (job demands and resources) and employee well-being is attributed to personal attitudes of workers as individuals, towards themselves (self-efficacy) and the organization they work for (intention to quit).

The nature of work has developed fast throughout the past few decades. Over the last twenty years in particular, many aspects of working life in general have changed significantly. The major changes are for example due to technological advancements, globalization of economy as well as increased utilization of information and communication technology. Work environment has also changed, especially in terms of relationships and communication between employees. Generally, their expectations towards support and leadership have developed and seem to have changed from practical and productive demands to more mental and emotional demands. That means that factors like good performance and high productivity are still valuable qualities but people increasingly require further quality elements such as good management, proper work conditions and equipment, quality communication and support at their jobs (Rothmann, Mostert & Strydom, 2006; Turner, Barling & Zacharatos, 2002). These changes are manifested also in the development of scientific research in the field of organizational psychology. For many years, exploring the relationship between stimulus and response was the primary concern in occupational research. Now however, there have been some advances in alternate views with more individualistic and relational perspective (Briner, Harris & Daniels, 2004; Dewe & Trennerth, 2004).

It should be addressed that well-being of employees has been defined in a variety of ways in organizational research. There is no generally accepted definition of the concept (Schaufeli, Taris & Van Rehenen, 2008). Rather, researchers attribute its characteristics to appropriate variables in each situation under study, which I strongly believe is an efficient strategy in this area of research because the field of organizational psychology is very situational. Thus, negligence and disregard of either people-oriented or situation-specific variables can be misleading. Results of such research are likely to provide misleading information about the true nature of the group or situation under study. Research that uses multiple factors, including
personal and environmental factors, is more likely to lead to useful results (Mark & Smith, 2008).

The aim of this research is to make a multi-dimensional approach to the well-being of hospital employees, involving both individualistic and environmental variables. To further address the scope of this research, I will begin by describing and explaining the background story leading up to it. Drastic changes in work environment, brought on for example by financial crisis, can be a critical test of health systems’ resilience and is also an ideal research opportunity. It is important to address this background as it is the primary initiative and inspiration for investigating this subject and making a comparison between Iceland and Sweden (Ólafsdóttir, Allotey & Reidpath, 2013; Ólafsdóttir, 2012).

**Economical crisis**

In 2008, a global financial crisis impacted many countries in the world simultaneously. But in the autumn of that year, Iceland was hit by a multifaceted economic crisis following the collapse of all its major banks whose worth was at least tenfold the national GDP (gross domestic product). A series of events over a period of less than two weeks brought the country into a severe economic recession and external debt that came with an immensely high cost for taxpayers. The Icelandic banking sector had grown to 10-times the size of the domestic production in just a few years, since the banks were privatized in 2003. After a series of incidents, not described or analyzed here, the Icelandic government was forced to nationalize the three largest banks within two days. That, on top of increased unemployment in the country, caused widely expressed frustrations among both groups and individuals affected by the financial restrictions. Generally, it is clear that the crisis had serious negative impact on the Icelandic society and caused great distress. One group in particular, healthcare professionals, were heavily impacted and faced tremendous restrictions and sudden increase in workload, threatening people’s health and well-being, both employees’ at their jobs as well as patients and clients utilizing the service (Ólafsdóttir, 2012; Ólafsdóttir et al., 2013).

“When written in Chinese, the word crisis is composed of two characters. One represents danger, and the other represents opportunity” (John F. Kennedy). Motivationally, it has often
been stated, and seems to be generally accepted, that a threatening situation can contain opportunities if the people involved respond to it in an adaptive way. In the Icelandic case, it has been questioned and will remain in debate whether the window of opportunity to rebuild and reform was put to proper use (Ólafsdóttir, 2012). So, how is this situation relevant to organizational psychology? Research has shown that governance and management significantly influence the ability of healthcare systems to adapt to dramatic changes and reorganize without causing stress, confusion or frustrations when sudden changes are made in basic structure and functions (Ólafsdóttir, 2012). The way a government responds during times of crisis is relevant to all aspects of society. Most, if not all, public institutions were impacted by this crisis. Hospitals in particular and other healthcare institutions were heavily affected. Management of various healthcare units reacted quickly to the Icelandic government’s request of adjusting to the operation of reducing public spending. Changes were made in structures within hospitals, wards and departments were merged or closed down altogether. This resulted in staff redundancies and reductions of overtime payments. Moreover, new out-of-pocket payments for hospitalization were introduced to the public and other changes were made that were completely new in the Icelandic healthcare history and became a source of contention within the population. Healthcare employees were caught unprepared, like other citizens, and uncertainty, confusion and frustrations started to build (Ólafsdóttir et al., 2013). This is why it is necessary to explore the situation in terms of possibilities to reorganize and rebuild such a fundamental service, like healthcare, efficiently and successfully.

Moreover, the situation is interesting and important to investigate because emigration among healthcare employees seems to have reached new heights every year since 2008—emigration levels that have not been seen in Iceland since the early 19th century (Ólafsdóttir, 2012; Statistics Iceland, 2011). Healthcare professionals are largely moving to Scandinavia seeking work and education and Icelandic medical doctors in particular, specialize overseas and many find opportunities to do so in Norway, Denmark and Sweden. It is problematic and quite severe that these healthcare professionals, emigrating abroad, have been reluctant to return after specialization and pursue a career in Iceland, which grossly exacerbates the situation at LSH University Hospital in Reykjavík, the largest hospital in the country, as well as in other healthcare departments (Directorate of Health, 2010; Ólafsdóttir, 2012). This makes a comparison between Iceland and Sweden particularly interesting.
It should be addressed here that further analysis on general governance as the crisis hit and its impact and aftermath is beyond the scope of this study. It is important, however, to explore what the window of opportunity might be, mainly for hospital managers and healthcare leaders in terms of reformation, motivation and encouragement to employees facing various sorts of unexpected restrictions and distress that can impact work conditions and well-being (Ólafsdóttir et al., 2013).

Icelandic and Swedish healthcare systems

Comparing the Icelandic and Swedish healthcare systems, both are listed as highly developed countries and both have delivered some of the best health outcomes seen with a global perspective in the past. In fact, when it comes to healthcare, both countries are high performing according to the United Nations Human Development index (HDI), which is a composite statistic of life expectancy, education and income indices, used to rank countries into tiers of human development. In this context it should be kept in mind that Iceland is a small country with less than 330,000 inhabitants. Sweden is much larger with a total population of 9.6 millions (Statistics Iceland, 2015; United Nations Development Program, 2008). Furthermore, according to the worldwide governance indicators, Iceland and Sweden are listed as two of the best governed high-income countries, which suggests that they can be expected to show high adaptive capacity to buffer significant threats and changes, like an economical crisis, and maintain high quality healthcare services (World Health Organization, 2010). However, it is evident that following the global financial crisis in 2008, the two countries were not impacted and governed the same. In 2010, over the span of two years following the crisis, Iceland had dropped 16 places on the HDI down to place 17. That is a dramatic fall compared to Sweden dropping two places to number nine over the same period. Currently, according to the 2014 report, Iceland is listed steady in place 13 behind Sweden in place 12. These numbers give a good reason to assume that the Swedish government, contrary to the Icelandic, was able to govern public hospital management well enough to avoid undesirable changes being made in basic structure and function of the healthcare system. Hence, in Sweden, the global crisis did not cause a threatening situation to people’s well-being and thereby, frustration, confusion and anger among the
population was prevented (Ólafsdóttir, 2012; Ólafsdóttir et al., 2013; Organization for economic co-operation and development, 2008).

However, even if the assessment of performances, like the HDI, has evened out since the crisis hit, the consequences are still very tangible in Icelandic society, manifesting in rising emigration levels, described earlier, and an ongoing series of strikes among healthcare professionals. In October of 2014, doctors commenced a strike, the first of its kind in history, which went on with unsuccessful negotiations with the Icelandic government for three months until agreement was reached in January 2015. Due to the banking crisis in 2008, doctors were forced to accept a 5% cut in wage and were asked to retain from seeking pay rises to keep the system going. Working overtime has been their only option to raise wages and the time came that they were no longer willing to engage in such measures to attain fair salary. What is interesting also, especially in light of the comparison made in this study, is that in the aftermath of the economic collapse, an agency called Hvíttir sloppar (White scrubs) was founded that solicits jobs in Sweden for Icelandic doctors. Many have taken unpaid leaves or quit working in Iceland altogether, and work in stints in Sweden instead and find that it pays off, they get higher salaries and are able to support their families. Moreover, at present, for medical professionals who have studied and worked overseas, Iceland has become less and less appealing to move back to. Doctors and nurses who specialize in Sweden face a hefty wage cut upon returning to Iceland, receiving only a small portion of the holiday allowance that their colleagues in Sweden are allotted. In this way, compensation in the Icelandic healthcare sector is no longer competitive with neighboring countries. International work conditions and earning potential outweighs what Iceland has to offer, especially in terms of workload, salaries and holiday allowances (Grapevine, 2014).

Since doctors reached agreement, other occupational groups have followed and want similar acknowledgement for their jobs and education. In April of 2015, the Association of Academics, representing 27 trade unions of academics in Iceland, agreed to go on strike in order to solve wage disputes. This has had widespread effects on the Icelandic society, and at LSH – the university hospital in Reykjavík, midwives, biomedical scientists, x-ray technicians and psychologists are currently striking and, as this is written, that dispute has not been resolved (Iceland on Review line, 2015). Healthcare is a vital segment of society. If work conditions and
compensations do not improve and start reflecting what comparable positions in other counties yield, there is a possibility that Iceland will face a severe shortage of medical professionals in years to come.

As explained earlier, the situation in Iceland, where three of the biggest domestic banks were nationalized simultaneously, has not been seen before. Many countries were affected but the economic meltdown in Iceland in particular has few precedents, if any, that can be compared in terms of the scale of the crisis and the type of country which makes cross cultural comparison difficult or perhaps impossible. It is important to acknowledge that most of the existing literature on this research topic focuses on lower- and middle-income countries where, by definition, there are obvious signs of corruption, abuse of human rights or lack of democracy. High-income countries like Iceland and Sweden have received less attention in this research field although Iceland has been a subject of analysis to a larger extent than Sweden has. Thus, it is not surprising that empirical literature lacks information on Sweden’s response to the crisis since strains and restrictions were hardly notable compared to the meltdown in Iceland (Ólafsdóttir et al., 2013). To my knowledge, so far no study has been conducted on the crisis’s impact on Swedish healthcare. Empirical test among healthcare professionals in Sweden of the variables used in this study and reaction to financial restrictions and undesirable changes, caused by the global crisis, is still outstanding. However, the evaluation of healthcare performance, like the HDI, suggests that in Sweden, the healthcare system has remained stable since 2008 and can be considered harmonious compared to the Icelandic healthcare system. Well-being of hospital employees in high-income countries, one of which is going through and facing severe financial strains, is not only an interesting research opportunity but a cross-cultural comparison that is also a relatively new contribution to this research field.

In the following section, the theoretical background is introduced of the main factors used in this study as well as definitions of key concepts, beginning by looking at the role and meaning of work conditions (job demands and resources) in employee’s well-being at work.
**Job demands and job resources**

Evangelia Demerouti and her associates Bakker, Nachreiner & Schaufeli (2001) developed the *Job demands and resource model (JD-R model)* which was used as a fundamental theoretical background in this study. It is a model that approaches an organization at multiple levels; from an environmental and social perspective as well as on an individual level. The model assumes that two underlying psychological processes play a role in well-being of employees: an *effort-driven process* in which excessive job demands and a lack of resources lead to distress, and a *motivation-driven process* in which job resources lead to work engagement. In short, this model categorizes psychosocial factors into the global categories of *job demands (JD)* and *job resources (JR)* to see how these may influence distress, commitment and motivation. In other words, a postulate of the JD-R model is that two distinct, yet related processes, contribute to the development of either stressful experience or general well-being at work (Jourdain & Chenevert, 2010; Rothmann, Mostert and Strydom, 2006; Schaufeli & Bakker, 2004).

The central assumption of this model is that although every occupation or organization may have its own specific work characteristics associated with well-being, it is still possible to model them in two broad categories, namely JD and JR. The former represent the aspects of a job that could potentially cause strain in cases where they exceed the employee’s adaptive capability. More specifically, this factor refers to physical, social and organizational aspects that require sustained physical and/or psychological effort on the part of the employee that are associated with physiological and/or psychological costs (Rothmann et al., 2006; Schaufeli & Bakker, 2004). It needs to be addressed that JDs are not always necessarily negative but they can lead to distress when employees are confronted with demands that require effort without having yet recovered from stress caused by previous demands (Meijman and Mulder, 1998; Rothmann et al., 2006). The latter represents the extent to which a job offers assets and opportunities to individual employees. More specifically, JR represents the physical, social or organizational aspects of a job that reduce the physiological and psychological costs of job demands. JR are also functional in achieving work goals and stimulating personal growth, learning and development (Demerouti, 2001; Rothmann et al., 2006). Thus, JR are not only necessary to deal with JD but are also important on their own as a key to attitudes and behaviors regarding well-
being in a workplace (DeBraine & Roodt, 2011; Elsass & Veiga, 1997; Hobfoll, 2001; Rothmann et al., 2006; Terry & Jimmieson, 1999).

To sum up these definitions, demands are said to be physical or social aspects of a job that require efforts and thus have physical and mental costs. Resources, as an aspect of a work place, help with employees’ achievement of work goals, reduce demands and stimulate growth and development. Demanding and resource providing job conditions influence some key elements and processes regarding health impairment and motivation (Llorens, Bakker, Schaufeli & Salanove, 2006). Various scholars maintain that this model is heuristic and overarching, containing principles which can be applied to any occupational setting regardless of particular demands or resources involved. Therefore, it is fair to make a general assumption that JD and JR are important causes of well-being and motivation at work (DeBraine & Roodt, 2011; Demerouti et al., 2001; Rothmann et al., 2006; Schaufelli & Bakker, 2004).

**JD and JR in different healthcare organizations.** Literature regarding JD and JR in hospitals in different countries is a limited source. But public hospital employees anywhere perform jobs that are highly client-centered. Their jobs consist of working intensely and intimately with other people, trying to help, comfort and provide care in a wide variety of circumstances. Such jobs are prone to be demanding and stressful. But work conditions that remain stressful for staff members (and patients alike), where there are limited resources designed to help employees cope with demands and stress, are especially likely to face negative consequences (Demerouti et al., 2001).

Karasek (1979) found in a study involving Swedish workers that heavy demands and low levels of resources at a job correlate positively with mental strain such as depression, burnout, exhaustion and dissatisfaction. Moreover, Karsek and Theorell (1990) found increased risk of illness for employees whose jobs make high demands but allow little control or opportunities. Thus, there is a valid reason to assume that an imbalanced levels of demands and resources in an organization, for instance with employees having a demanding work schedule (i.e. heavy workload and high requirements) without having much support or control, will have an increased risk for stress-related illnesses, both physiological and psychological. Therefore, a balanced level of JD and JR, meaning fair pressure and good support at work, have been found to directly impact psychological well-being of employees as well as constructive attitude and productive behaviors (Rothmann et al., 2006). For this reason, it is highly relevant to understand the roles of
demands and resources (and/or the lack thereof), not in terms of correlation but balance between them in every organizations and how an imbalance can negatively impact employee’s attitudes and well-being.

The main assumption made in this study about the difference between Iceland and Sweden, following the crisis, in terms of demands and resources is that Icelandic hospital employees have faced drastic, challenging changes in the recent years, and have been negatively impacted by a financial restraints. It has resulted in employees of public hospitals in Iceland having to invest more in their jobs in terms of time, effort and flexibility, whereas they receive less in terms of support, security and opportunities (Ólafsdóttir, 2012). Therefore, imbalanced perceptions of JD and JR in Icelandic hospitals can be expected and as a result of that imbalance, employees are likely to experience high levels of distress and have negative, destructive attitudes (Jackson & Rothmann, 2005; Rothmann et al., 2006). As mentioned earlier, it needs to be acknowledged that well-being at work is multi dimensional and can be impacted in various ways. Therefore, it needs to be approached on multiple levels, considering environmental characteristics and employee’s personal aspects of every situation (Rothmann et al., 2006). Attitudes people have towards themselves have been shown to be a significant factor with high predictability in various situations in the working life (Landy & Conte, 2010a). The factor of self-efficacy, reviewed in the following section, contributes to the multidimensionality of individual difference, and is an important addition to the measure of employee perception of job characteristics. Self-efficacy is an attitude that, according to research, has association with various work-related behaviors and one of the keys to employee well-being in any organization (Crocker & Nuer, 2004; DuBois & Flay, 2004).

**Self-efficacy and well-being at work**

Originally, Albert Bandura (1986) presented the concept of self-efficacy and it is playing increasingly important role in most modern theories and occupational research, especially regarding work motivation (Bandura, 1997; Landy & Conte, 2010a). A broad notion of the concept would be the level of pride one takes in him –or herself as a human being. Here, self-efficacy has a slightly narrowed down definition to fit the field of occupational research. The
concept in modern organization psychology can be defined as the belief one has in own capability to perform a specific task or reach a particular goal. It is the feeling of confidence (or lack thereof) about accomplishing job related goals and succeeding with a challenging project at work. More specifically, self-efficacy relates to our confidence in our own ability and in the likelihood of being able to succeed in a challenging work situation (Bandura, 1997; Paulhaus, 1983).

This type of self-efficacy has been a popular topic in psychological research and, for the past two decades, the number of studies has increased drastically on the subject. Self-efficacy is particularly relevant in a work setting because it has an important social or interpersonal aspect to it. People tend to experience increased self-efficacy when they perceive or gain other peoples’ respect or admiration (Judge & Bono, 2001). Some scholars even see it as a natural and essential element for emotional well-being (DuBois & Flay, 2004) however other scholars see the pursuit of self-efficacy as a potentially destructive process (Crocker & Nuer, 2004). So, the benefit of high self-efficacy remains in debate, but the meta-analytic evidence of Judge & Bono (2001) suggested that efficacy relates positively to employee well-being. It has predictability for constructive and positive attitudes like good performance and satisfaction. Thus the level of self-efficacy can significantly impact behavior. This allows us to assume that employees with a high level of self-efficacy, workers with good confidence in their ability, can be expected to be more motivated and satisfied whilst a lack of self-efficacy can result in a low level of commitment and other negative behaviors such as more frequent absences and resignations among employees. This can be expected especially when low self-efficacy is combined with high demands and low levels of resources. Self-efficacy is an attitude that has implications for work motivation and other job related attitudes and can impact the likelihood of quitting (Judge & Bono, 2001; Landy & Conte, 2010b) which leads us to the other type of attitude measured in this study; intention to leave a profession or an organization –reviewed in the following section.

**Intention to quit**

Landau and Hammer (1986) were the first ones to describe the phenomenon of intention to quit (ITQ) as an attitude in organizational research. Initially, they looked at desire of movement
between different organizations which refers to both employee’s assessment of their opportunities to find better jobs or positions and their desire to quit their current jobs. They found that employees who have high score on this attitude tend to be less committed than their coworkers and are more likely to explore alternative job possibilities. If they find that alternatives exist, they may be more likely to leave. Moreover, alternatives are not available, people can be expected to adjust their aspirations or contributions to their organizations downward, which means lack of commitment and sometimes lower quality of performance and less productivity (Firth, Mellor, Moore & Loquet, 2004). Having intentions to quit is clearly linked to well-being at work because a lack of opportunities for advancement can lead to increased dissatisfaction resulting in people being less committed and less motivated and more likely to actively search for new jobs with intentions of quitting as soon as they find acceptable alternatives. Or, in case of alternatives not being available, they may react by lowering their aspirations and desires at their current jobs (Firth et al., 2004; Landau & Hammer, 1986).

Relating ITQ to demands and resources, empirical evidence suggests that there is a relationship between employees’ perception of present and future opportunities and their experiences, expectations and attitudes towards their jobs and organizations. This way, ITQ is in fact closely related to JR and can influence job related feelings and attitudes. Employees can be expected to work harder and perform better when they perceive that advanced positions are available, and on the other hand, people who perceive few opportunities tend to have negative attitudes towards their work and their organizations. These factors can, independently and combined, account for the way people involve themselves in their jobs. Increasing opportunities can heighten work commitment, motivation and sense of organizational responsibility (Landau & Hammer, 1986). Moreover, Firth et al. (2004) studied the relationship between ITQ and distress among employees. According to their results, emotional support from supervisors and self-efficacy clearly mediated the impact, and explained a large ratio of the variation of stressors on job satisfaction, commitment and ITQ.

Jourdain and Chenevert (2010) also investigated the relationship between employee well-being (quantified as stress related factors in the work environment) of nurses and their intention to leave their profession. More specifically, they investigated the nature of the relationship between JD and JR perception and the ITQ. Their findings indicated that demands are the most
important determinants of emotional exhaustion whereas resources mainly predict depersonalization, which are variables associated with ITQ. Hence, perceived opportunities are related to the desire to leave, and in light of the fact that healthcare employees in Iceland have been seeking alternatives externally, the focus of this study is on perceived desire of movement outside the hospital rather than within it.

**Summary and goal of research**

In this study, employee well-being is framed in perceptions of job characteristics; demands and resources as well as attitudes towards one self and the organization at hand; self-efficacy and intention to quit—all of which are key elements in well-being and quality work environment. Empirical evidence suggests that employee well-being can be boosted by motivational processes featuring fair demands and proper resources involving support and opportunities (Rothmann et al., 2006; Schaufeli & Bakker, 2004). Well-being is also positively impacted through high levels of self-efficacy which can be boosted by constructive feedback and involvement in an organization (DuBois & Flay, 2004).

In order to identify management opportunities that can aid healthcare personnel in challenging and difficult circumstances, the following research question was formulated: *is there a significant difference in employee perceptions of job demands and job resources, and do the levels of self-efficacy and intention to quit differ significantly between hospital employees in Iceland and Sweden?* This research question has several facets and to answer it I formed the following four hypotheses;

**Hypothesis 1.** Employees in Iceland will perceive a significantly higher level of job demands than employees in Sweden.

**Hypothesis 2.** Employees in Iceland will perceive a significantly lower level of job resources than employees in Sweden.

**Hypothesis 3.** Employees in Iceland will have a significantly lower score of self-efficacy than employees in Sweden.
Hypothesis 4. Employees in Iceland will have a significantly higher score of intention to quit than employees in Sweden.

The aim was to examine employee perception of JD and JR as well as levels of personal-efficacy and ITQ and make a comparison between Iceland and Sweden. In other words, to investigate if job characteristics and personal attitudes differ between hospital employees in these two countries. Ultimately, the aim was to identify ways to increase the well-being of healthcare professionals because that would benefit the healthcare system at large and make it more effective and efficient. Thus, on a practical level, the goal was to get an idea of what will predict well-being in times of an economical crisis and financial restrains. However, it has to be clear that the aim was not to investigate the direct impact of the crisis on well-being of healthcare professionals as the same measurement was never made prior to the crisis. Therefore, it is impossible to attribute my findings to the economic crisis directly. But numerical data on healthcare performances in Iceland and Sweden give good reasons to assume that employees were impacted by the crisis, and therefore the situation presents an interesting opportunity to make a cross-cultural comparison. The changes in Iceland also became an inspiration to identify ways to create a motivating and supporting work environment in hospitals.

METHOD

Respondents and organizations

The samples in this study consist of healthcare employees in public hospitals in two countries, Iceland and Sweden. In this way, participants were not classified by nationalities but according to the geographical location of the hospitals. The following basic information was obtained: gender, age and work hours and all participants were asked whether or not their job was specialized, occupation was not specified further and it is worth mentioning that all of the respondents were employees of the hospitals in both samples. That means that during the time that the data was collected, no self-employed workers were temporarily deputizing under a special contract at the hospitals. This was a convenience sampling and the population included all hospital personnel, involving: doctors, nurses, nurse aides, psychologists, social workers, occupational therapists, secretaries and any other members of the hospital staff, regardless of
their role or occupation. Subjects in total were 225 employees (52 males (23%) and 173 females (77%)), all of whom were anonymous and participated voluntarily. The gender ratio was uneven in both samples, containing more women than men. The gender difference was significant according to chi-square test: $X^2(1, N = 225) = 17.694, p = .00001$. However, gender ratios in healthcare occupations are typically uneven according to research. Many jobs within healthcare have shown to be female dominated. Nurses and nurse aides are, for example, typically occupied by fewer men (Grant, Robinson & Muir, 2004). Thus, the gender ratio in this study can be considered fairly representative for the population of hospital employees. It ought to be acknowledged that there were fewer men in the Swedish sample than there were in the Icelandic sample but that was not of concern in calculations since gender was not an independent variable in this study.

The reason I only choose to collect data in public hospitals is that privately owned healthcare institutions and clinics are usually set up to profit, following the principles of the free market. But public healthcare institutions cannot solely operate along free market principles and are thus operated on a different, more client-oriented premise. That is why data was only collected in public hospitals, financed through general taxation.

**Icelandic sample.** A total of 106 employees responded to the survey (35% males and 65% females), all working at various psychiatric units of LSH –the University Hospital of Iceland, including a variety of care units, both wards and outpatient clinics, for example; emergency care, intensive care, a forensic ward, rehabilitation and treatment clinic of addiction and substance abuse. A total of five invalid questionnaires were excluded from calculations and thereby not considered as part of results. Age was evenly distributed with most categories containing even numbers of respondents. A vast majority of participants worked day, evening and nightshifts combined (95%) and the rest worked irregularly at the hospital, for example, nights or weekends only (5%). Lastly, 41% of respondents were specialized staff members and 59% unspecialized.

**Swedish sample.** A total of 119 participants (13% males and 87% females) working at various departments at a public hospital in Southern Sweden, both wards and outpatient clinics, including; emergency department, an intensive care unit, neurological ward, rehabilitation and internal medicine. No questionnaires were excluded from calculations. Age was evenly distributed across the sample from the age of 25-60 with very few being under or over that age.
group. A vast majority of participants worked day-evening- and nightshifts combined (95%) and the rest worked irregularly at the hospital (5%). Specialized employees were 58% and unspecialized were 42%.

**Instruments**

The whole questionnaire was seven pages. Surveys were administered using paper-based questionnaires in various hospital departments. They were anonymous, self-report measurements and each participant was free and willing to participate without payment or reward of any kind and answered to multiple-select questions on a Likert-scale.

*Job demand and resource scale (JDRS)*. Jackson and Rothmann (2005) originally developed a 42-item questionnaire to assess job demands and resources. The scale is generally used to assess the differences between groups and organizations in terms of employee perception of pressure and support on a job. But before any measures can be compared between groups, it is necessary to assess the construct equivalence of the measuring instrument in the groups under study. If cultural influences are not accounted for when scales are translated and used for comparison, invalid conclusions could be made with some serious implications for diverse organizational settings (Rothmann et al., 2006; Xanthoupoulou, Bakker, Demerouti & Schaufeli, 2007). Rothman et al. (2006) explored the scales construct validity, equivalence and reliability to investigate the extent to which the same construct is measured across the cultural groups under study. According to their results the JDRS is valid, reliable and equivalent for various organizations. The Icelandic version of the scale (the one translated to Swedish) contains 62 items and eight sub-factors; growth opportunities (JR), organizational support (JR), advancement (JR), overload (JD), job insecurity (JD), physical stress (JD), work-to-family-conflict (JD) and family-to-work-conflict (JD). All questions were rated on a 5-point Likert-scale. With this variety of components, organizational and individual characteristics are conceived of and assessed from various perspectives. Thus, the scale and the model behind it, compliment the importance of multiple individual factors playing a role in employee well-being.

*Personal efficacy scale*. This scale is a part of a larger instrument called the Spheres of control scale (SOC) which is a multidimensional measure originally designed to assess locus of
control. Over the past decades, it has become generally accepted that the construct of spheres of control is multidimensional and it has been noted in scientific research that people can assign control to themselves in a variety of ways. Today this scale is in its third revision but the measurement that was translated and used in this study was the original version developed by Paulhaus and Christine in the early 1980s’ (Paulhaus, 1983). The SOC scale is a combination of three subscales –one of which quantifies personal control or self-efficacy in a work setting (Spittal, Siegert, McClure & Walkey, 2002). All of the three SOC subscales were originally constructed and refined over a period of two years in a series of five psychometric studies, until the final set of ten items in each scale was presented, rated on a 7-point Likert-scale. This scale was used here because it has shown to be balanced with respect to construct equivalence. Typical alpha reliabilities for the subscales are .75-.80 on cross-validation samples (Paulhaus, 1983).

**Intention to quit (ITQ).** Initially, a factor analysis was performed by Landau and Hammer (1986) to quantify the attitude of wanting and/or planning to leave a job at an organization. This concept is measured to make assumptions about the likelihood of resignations among employees and it is considered a negative attitude towards an organization (DeBraine & Roodt, 2011). The purpose of using this instrument was to compare hospital employee’s intention to leave their jobs between Iceland and Sweden. The Icelandic version, the one translated into Swedish, contains six items and is built on the measurement scale of Landau and Hammer with the twofold addition of timing and quantification of the ITQ. That was done to prevent response homogeneity and to distinguish between virtually everybody who are likely to have thought about quitting at some point in time and others who actually have this attitude and experience at their jobs. Thus, because everyone can be expected to think about changing environment and quitting what they are doing once in a while, the addition of seriousness and a timeframe to quantify the attitude adds to the construct validity of the scale. Homogeneity was good for both samples with a relatively high alpha values, presented in table 1.

**Procedure**

Late in the year of 2014, secondary data regarding the financial crisis in Iceland (parliamentary documents, news and healthcare discussions in the media on web pages and in Icelandic news
papers) had been reviewed and initiated the idea of this study; to make a comparison between hospital employees in Sweden and Iceland. Initially, Hjalti Einarsson, a M.Sc. student in work psychology and a project manager at the Psychiatric Division of LSH, the University hospital of Iceland in Reykjavík was contacted to discuss research opportunities. At a meeting in December 2014 I was presented with measurements that he had conducted at the hospital six months earlier. That data was part of a research lead by Professor Jón Friðrik Sigurðsson, head of M.Sc. programs in psychology at the University of Reykjavík and formerly, head of psychologists at LSH. In order to get permission to utilize these measurements and make a repeated measure in a Swedish sample, a formal application was sent to the hospitals bioethics committee. The application was approved in May and access to the data collection granted for use in this study (referral number: 34/2012).

The scales were all a quantitative self-report measurements in which participants rate their own attitudes and feelings, perceptions and experiences. All of the instruments used in this study had been translated by Einarsson and Sigurðsson from the original English versions. The Icelandic versions of the scales were then translated for the sample in Sweden with a back translation and a pilot study. The back translation was mostly done by myself with the assistance of my supervisor and a good support from a neutral third party, who has native origins in both Iceland and Sweden, is fluent in both languages and has a MSc degree in organizational psychology. Surveys were then distributed and collected at a public hospital in Southern Sweden in February and March of 2015. The hospital manager had granted permission to conduct the study with a provision that the questionnaires would be distributed to the departments and left there for a few weeks so employees could complete them in their own time. Employees in every department were seen regularly during that time and instructed and encouraged to fill in the questionnaires during working hours and return them completed directly to closed response-boxes, placed in every department. A cover letter accompanying the questionnaire explained that the survey was a part of a research project for a master dissertation in psychology. Participants were told that the survey was designed to measure attitudes, feelings and work conditions and that their responses to the survey would be kept confidential and anonymous. Participants were also informed that, as mentioned earlier, participation was voluntary and that withdrawal of participation was free at any time but it would be in the best interest of the research to complete and return the questionnaires.
Statistical analysis and research design

Statistical data analysis was carried out with the SPSS program (SPSS Inc., 2003) and to the extent possible, only scales were used that had previously been empirically validated. Descriptive statistics was used to explore the data as well as item analysis for the total scores of each scale. A scale’s reliability is especially important and informative in a cross-cultural study to make sure that the items are related to the same construct. Possible cultural difference of the groups involved need to be acknowledged, and so, Cronbach’s alpha coefficients were calculated to assess the reliability of the all the constructs measured in this study, listed in table 1:

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach’s alpha α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job demands</td>
<td>Sweden</td>
</tr>
<tr>
<td></td>
<td>Sweden</td>
</tr>
<tr>
<td>Job resources</td>
<td>Sweden</td>
</tr>
<tr>
<td></td>
<td>Sweden</td>
</tr>
<tr>
<td>Personal efficacy</td>
<td>Sweden</td>
</tr>
<tr>
<td></td>
<td>Sweden</td>
</tr>
<tr>
<td>Intention to quit</td>
<td>Sweden</td>
</tr>
<tr>
<td></td>
<td>Sweden</td>
</tr>
</tbody>
</table>

Before summing each scale, the number of positively and negatively keyed items was balanced and scoring for items with negative loadings was reversed. The α-values for the scales in both samples were sufficiently high ranging from .78-.93 for the constructs of JD, JR and ITQ. However, the self-efficacy construct had a slightly lower reliability coefficient. The Swedish version of the scale had an α-value of .73 and .63 for the Icelandic version. Any Cronbach’s coefficient below .70 is by some scholars considered insufficient as it could indicate an unreliable measure (Field, 2009). But an α-value is not easily interpreted. It should always be put in context and evaluated with caution. Here, no items were excluded from the scales except from the efficacy measure which was a scale of only ten items. Three items were removed in the Swedish sample and one item in the Icelandic sample. Those were items that decreased the measures’ reliability and were thus excluded from calculations. But overall, even with these constraints, the predicted reliability of the scales was quite favorably sustained by the data.

Since this was a between group design with four multiple dependent variables, a multivariate analysis of variance (MANOVA) was conducted to assess the significance of differences between the samples. This method is used to compare groups on a range of different
characteristics, common in research like this one, focusing on evaluation of impact of a situation on a variety of outcome measures. Basically, a MANOVA compares the groups and tells us whether mean scores differ between them and if the combination of dependent variables are likely to have occurred by chance. It also provides the univariate results for each of the dependent variables separately. The advantage of using MANOVA instead of a series of regular ANOVAs, is that it controls for the increased risk of a type 1 error. That means that the benefit of using MANOVA is that it lowers the risk of incorrectly rejecting a null hypothesis or concluding that there is a significant difference when in fact the means differ due to chance (Field, 2009). However, a MANOVA also has a number of additional assumptions that must be met in comparison with a regular ANOVA. Sample size, normality, outliers, linearity, homogeneity of regression, multicollinearity and singularity and homogeneity of variance-covariance matrices are the assumptions that have to be fulfilled before a MANOVA is run (Rothmann et al., 2006; Tabachnick & Fidell, 2001). In the present context, we are looking at one categorical independent variable/IV (country) so this will be a one-way MANOVA, and then four continuous dependent variables/DVs (JD, JR, self-efficacy and ITQ). It tests the hypothesis that the population means, on a set of dependent variables, vary between the countries.

RESULTS

Beginning by presenting the means and standard deviations of all the constructs in both samples, reported in table 2:

<table>
<thead>
<tr>
<th></th>
<th>Sweden M (SD)</th>
<th>N</th>
<th>Iceland M (SD)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job demands</td>
<td>82.3 (10.3)*</td>
<td>119</td>
<td>65.0 (10.0)</td>
<td>104</td>
</tr>
<tr>
<td>Job resources</td>
<td>121.4 (16.1)</td>
<td>118</td>
<td>117.2 (19.3)</td>
<td>105</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>5.2 (0.7)</td>
<td>115</td>
<td>5.3 (0.7)</td>
<td>104</td>
</tr>
<tr>
<td>Intention to quit</td>
<td>14.9 (6.7)</td>
<td>115</td>
<td>15.3 (7.2)</td>
<td>106</td>
</tr>
</tbody>
</table>

*significant difference between mean scores was found with p<0.001

An inspection of the mean scores indicated that employees in Sweden perceived drastically higher level of JD with a difference of nearly two standard deviations (maximum JD score = 135). So, the first hypothesis was not supported. JR perception was slightly lower in Iceland, as
expected, but the difference was not significant (highest possible JR score is 175) and the second hypothesis was thereby not supported. However, notably, the JR variation was large in both samples with high standard deviations, indicating a lot of variety in responses. In order to better understand his variety it was inspected with a one-way ANOVA for two background variables: occupation and gender to see if total scores would vary between men and women and whether or not employees were specialized. The effect was insignificant for both variables in the Swedish sample but significant in the Icelandic sample for both occupation \((F(1,99) = 17.113, p< .0005)\) and gender \((F(1,117) = 17.273, p< .0005)\). Lastly, the levels of self- efficacy and ITQ are similar in both countries with no statistical difference between the groups. Hence, hypothesis three and four were not supported either. The total scores on personal efficacy and ITQ were neither high nor low, ranging right in the middle in both samples; maximum scores for efficacy = 10 and ITQ = 30. All of the DVs were normally distributed in both samples without any outliers that skewed normality or impacted calculations.

A one-way between-groups MANOVA was performed to investigate differences in well-being between hospital employees in Iceland and Sweden (IV). Four DVs were used: job demands, job resources, self-efficacy and intention to quit. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices and multicollinearity with no serious violations noted. A statistically significant difference was found between Iceland and Sweden on the combined dependent variables, \(F (4, 210) = 42.48, p < .001; \) Wilks’ Lambda = .55; partial eta squared = .447. When the results for the dependent variables were considered separately, the difference to reach statistical significance, was perceived level of JD \(F (1, 212) = 152.49, p < .001; \) partial eta squared = .42.

Looking further into the difference in JD perception, a descriptive statistics on the five sub-factors of job demands is presented in table 3:
Table 3. Mean score and standard deviation for each sub-factor of job demands

<table>
<thead>
<tr>
<th>Sub-factor</th>
<th>Sweden M(SD)</th>
<th>Iceland M(SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overload</td>
<td>3.79 (0.4)</td>
<td>3.27 (0.6)</td>
</tr>
<tr>
<td>Job insecurity</td>
<td>2.43 (1.0)</td>
<td>1.95 (1.1)</td>
</tr>
<tr>
<td>Physical stress</td>
<td>3.27 (0.8)</td>
<td>2.14 (0.7)</td>
</tr>
<tr>
<td>Work-family conflict</td>
<td>2.41 (0.8)</td>
<td>1.99 (0.7)</td>
</tr>
<tr>
<td>Family-work conflict</td>
<td>1.95 (0.8)</td>
<td>1.51 (0.6)</td>
</tr>
</tbody>
</table>

These mean scores range on a scale of 1-5 and the largest difference between the groups was on physical stress, differing by more than a whole standard deviation. According one-way between-groups MANOVA results, employees in Sweden scored significantly higher on the combined sub-factors $F(5, 208) = 35.47, p < .001$; partial eta squared = .460. When the sub-factors were considered separately, each of them revealed statistically significant difference; overload $F(1, 14.4) = 61.36, p < .001$; partial eta squared = .224. Job insecurity $F(1, 12.22) = 11.09, p < .001$; partial eta squared = .050. Physical stress $F(1, 67.49) = 117.50, p < .001$; partial eta squared = .357. Work-family conflict $F(1, 9.19) = 17.52, p < .001$; partial eta squared = .076. Family-work conflict $F(1, 10.39) = 21.39, p < .001$; partial eta squared = .092.

**DISCUSSION**

**Theoretical contributions**

Looking at the descriptive statistics, mean scores seem to be similar for every construct, with the exception that employees in Sweden quite obviously perceive much higher level of demands at their jobs. Other factors did not differ significantly between the samples. An interpretation of these findings, with direct regard to hypothesis, tells us that employees in both samples did not have serious intentions to quit and had a relatively high level of self-efficacy, meaning they are equally confident in their ability to handle and control a challenging situation at work. Perception of JR (support and opportunities) in both countries seems fairly good but, responses were quite widely dispersed and looking closer at the variation, no difference was found between men and women or specialized and unspecialized staff members in Sweden, all sub-groups seem to perceive similar level of support and opportunities. In Iceland, however, women and specialized...
employees perceive significantly higher level of resources, revealing that imbalance between JD and JR is significant among men and unspecialized employees in Iceland.

As mentioned above, the level of demands was unexpectedly much higher in Sweden. That refers to the experience of overload (amount of work, time-pressure and mental and emotional load), job insecurity (uncertainty about the future at the organization), physical stress (having to perform jobs in uncomfortable bodily positions or performing tasks that require too much physical efforts) and imbalance between work and private life. Hospital employees in Sweden scored significantly higher on each of these sub-factors compared to employees in Iceland. According to the calculated effect sizes of these elements, about 36% of this big difference between the total scores of JD perception, is likely to be explained by people’s perception of physical stress. In other words, the extent to which the job requires too much physical effort explains over one-third of the variation of JD perception. That is not surprising, as data was collected among employees in psychiatric wards in Iceland where physical needs of patients are mostly taken care of by themselves, opposed to clinical wards of other kinds that care for patients with illnesses of a physiological nature. In Sweden, the questionnaires were distributed in various wards that attend to physical needs of patients to much more extent and employees are thus exposed to more physical demands and efforts due to the nature of care at the job. All health professions face numerous stressors within their clinical practice, such as time pressures, workload, multiple roles and emotional issues and thus the type of clinical care provided by employees was not a factor of interest in this study. But according to analysis of variance of the JD sub-scores, the factor of physical stress was much higher in the Swedish sample and that difference is attributed to the difference in hospital clinics or the nature of care provided by employees. It explains a large part of the overall difference found between the countries. In other words, the results may reflect a large difference in job demands between different types of clinics rather than the countries.

I want to be very careful in attributing these findings to anything in particular. Effect size, like the one interpreted above, can be useful in understanding possible or likely cause of a difference but it ought to be interpreted with caution. There are a lot of loose ends end dimensions to this situation that were not explored or controlled for in this study. These results will not be attributed directly to the crisis as the same measurement was never made prior to the
meltdown, and thus I do not speak of any causal relationships in this context. But having explained how financial restrictions and crisis has shaped and affected the Icelandic healthcare system with some drastic, mostly undesirable, changes that have exposed healthcare professional to factors that are known to contribute to personal and work-related burnout and exhaustion – they should be expected to experience loss of confidence and be more likely to have destructive attitudes and negative behaviors (Jackson & Rothmann, 2005). Whereas in Sweden, people have not been exposed to the same changes and insecurity yet they report higher level of demands at their jobs.

Even if the difference between the samples can largely be attributed to the difference between the hospital clinics in which the data was collected, a large part of the whole difference is left unexplained. Reflecting upon the unexpected results the concept of culture comes to mind. Birgir Jakobsson, head of the Directorate of health in Iceland, who has a vast experience in directing healthcare institutions both in Sweden and in Iceland, said in an interview in May 2015 that he felt that the culture and mentality of healthcare leaders and professionals in Iceland had for a long time, both after and prior to the crisis, been characterized by frivolity and liberal way of thinking, insinuating that healthcare professionals have lacked seriousness and not been prudent in creating efficient structure and policies in healthcare. As a consequence, anything that was wrong with the healthcare system before the crisis, span out of control when the country’s economy collapsed (Vísir, 2015).

Mentality might differ between the cultural groups in this study. Culture might impact how people perceive stress and demands in general. Hardiness is a psychological concept, defined as the ability to endure difficult conditions, a constellation of personality characteristics that function as a resistance resource in the encounter with stressful life events (McCann, Beddoe, McCormick, Huggard, Kedge, Adamson & Huggard, 2013). The higher the hardiness level, the greater the ability to experience stress without apparent negative consequences (American Psychological Association, 2003). Thus, hardiness can be understood as a form of strength and resilience that, at least partly, explains why some people remain healthy and happy under stress when others don’t. Why do some people suffer physical and mental breakdowns when faced with overwhelming stress while others seem to thrive? A longitudinal study, conducted in an organization of which employees faced drastic changes in job descriptions,
company policies, goals and supervision, showed that about two-thirds of the employees suffered
significant decline in performance and health. However, the other one-third actually thrived
during the upheaval despite experiencing the same amount of disruption and stressful events as
their coworkers. Thus, one-third maintained their health, happiness and performance and even
felt renewed enthusiasm. What made the two groups so different? Researchers assumed that
there were three key beliefs of hardiness that differed between the groups: level of commitment,
sense of control and the ability to perceive challenges and changes as learning opportunities.
Thus, the level of hardiness seems to be essential to resiliency for thriving under stress because it
enhances performance and well-being, both physical and mental, and gives people the courage
and capability to turn adversity to advantage (American Psychological Association, 2003).

In terms of culture, it might be interesting to investigate the level of hardiness between
the groups in this study. However, it should be kept in mind, especially in light of the high
emigration levels among healthcare professionals in Iceland, that those who have already
resigned were not a part of the sample in this research. Many have already quit their jobs due to
high levels of demands and lack of resources. Therefore, a large group of employees in Iceland,
that assumably would have had serious intentions to quit and perceived imbalanced levels of
demands and resources, also represent the population of hospital employees but were not
included in the measurements.

Will this difference in JD perception be explained with culture and mentality? Is it simply
the ability of people to adapt and adjust to a challenging situation? Those are questions that
require further investigation and could be interesting topics in future research. Other external
factors are also possible explanations like concrete information about salary, work hours or work
duty. But in any event, it is known that the determinants of employee well-being may differ
within and between various organizations and work environments, depending on the unique
demands and resources that exist in the specific work context. It seems that every occupation or
organization has its own specific risk factors regarding well-being. For instance, burnout of
employees can in some work places be primarily caused by emotional load and workload or time
pressure in another. Lack of autonomy can be a leading cause in yet other workplaces. Various
different factors have different impact and seem to be important stressors for some workers more
than others (Rothmann et al., 2006). In sum, the answers to the hypothesis in this study raise an array of new questions, discussed in the following section.

**Implications for future research**

Here I want to reflect upon and consider approaches that might facilitate future research in this area. As mentioned earlier, little is known about reformation of healthcare systems in high-income countries like Iceland and Sweden in times of financial restrictions. That topic requires more empirical investigation. Moreover, research looking at governance in the health sector in Sweden, after the global crisis, would have been valuable adjunct to this comparison but is non-existent for the time being. So the current study may well serve a fruitful direction for further research. Further investigation is also needed regarding the JD and JR as experienced by employees in different organizations between countries, and in hospitals in general. Moreover, in light of the findings of this research, it would be interesting to investigate possible association between culture and people’s evaluation of their own well-being. Such approach could for example evaluate cultural differences in JD and JR perception.

There are, of course, many studies on employee well-being and its association to changes and restrictions. Most of them, however, use organizational approaches to that are usually descriptive in nature. That is, instead of explaining work-related well-being they just describe what types of organizational variables are associated with it. It is important to keep in mind that generally, theories and models can be useful to explain the effects of job characteristics, but it would be more efficient and practical to explain instead of describing (Rothmann et al., 2006; Schaufeli, 2003). And to do so, many frameworks and theories in organizational psychology could benefit from the inclusion of more individual variables and work characteristics. This field of research is complex and highly situational. Future research should emphasize multi-dimensionality and researchers should strive after assessment of a collection of variables that would capture most people, most of the time in a specific context. However, too much complexity in research and a too large array of variables could become problematic in interpretation of results, so a middle ground between simplicity and complexity is essential. It is
equally important not to fall into oversimplification than it is to not to make overly complex assumptions. Balance is key.

This study aimed at making a multi-dimensional approach at employee well-being in hospitals, and account for the importance of balance between simplicity and complexity. It should be acknowledged however that the measures in this study encompassed only a subset of possible performance indicators thus only few dimensions were identified. There are several limitations to this study that are recognized and analyzed in the following section.

Limitations

Firstly, as an Icelandic citizen and a former employee of LSH –the university hospital in Iceland, I was impacted by the crisis myself. And having been involved and affected by the situation it should be acknowledged that my background may impact my interpretation of the findings. In other words, there is a possibility that the results would be different if analyses were done by impartial researcher. However, due to my involvement, I was also inspired to look deeper into the situation. The perspective of a native researcher, like myself, might also have facilitated access to information (through media for instance) that a foreign outsider, not impacted by the situation, might have missed or found difficult to obtain. But throughout the process of conducting this study, the maintenance of objectivity was a constant focus.

Secondly, a limitation worth mentioning is that one scale had a relatively low reliability coefficient (α-value). Therefore, I feel it is important to discuss its interpretation. Reliability measures are not easily interpreted and they depend on several different factors, for instance, the number of items in the scale. As the number of items increases, the α-value can be expected to rise. Thus, a questionnaire with few items is not likely to have a very high α-value but that does not necessarily mean that the scale is unreliable. The scale measuring self-efficacy in this study had only ten items. There are of course some general guidelines in the literature about interpretation saying that any α-value below .70 indicates an unreliable scale. Some scholars even say that anything above .50 is sufficient. However, even according to general guidelines (which ought to be interpreted carefully) this scale could very well be reliable (Field, 2009). Some scale items did not contribute to the scale’s reliability. Items-to-total score that had an α-
value below 0.50, indicating that the question measures something that is irrelevant to the construct of the personal efficacy scale, were excluded from the total score. In the Icelandic sample, one item was removed and three in the Swedish translation. What may have caused low reliability in this case, apart from the scale containing few items, is that these scales were translated and then a translation was translated again. There is always a possibility of an overlap of meaning. The concept of efficacy may bear some overlap in its conceptualization with other concepts (Van de Vijver & Leung, 1997).

In any cross-cultural investigation, the translation of instruments presents problems for researchers. The risk, threatening reliability when a scale is translated, is the question whether the operationalisation still reflects the true meaning of the construct. Thus, a translation can threaten a measurements validity and reliability due to cultural and linguistic differences. Questions, terms and items can have different meanings between the groups that are being compared (Rode, 2005; Van de Vijver & Leung, 1997). In this study, two translations were used. The Icelandic scales were translated from the original versions and the Swedish scale was a translated version of the Icelandic translation. Hence, a translated translation was applied in the Swedish sample. To address these problems a back-translation procedure and a pilot study were conducted. In the end, the samples represented the population evenly in terms of gender, age and occupation. And when problematic items had been spotted in item analyses and removed, the total scores of the groups were similar and comparable.

Although this study was primarily intended to test theoretically derived hypotheses, my findings have some practical implications. The aim was also to find tools to motivate hospital employees, mainly through the adjustment of demands and resources in a work place.

**Practical implications**

Hospital management is a highly complex phenomenon. There is no universally accepted definition or theory of quality management in healthcare. However, empirical research has presented many models and theories that identify ways to provide efficient and good healthcare services (Ólafsdóttir, 2012). When it comes to management, employee-stress is either aggravated or alleviated by the leadership and characteristics of the work environment. On one hand,
demands like heavy workload and emotional pressure can lead to dissatisfaction, less commitment and decreased productivity. On the other hand, resources, feedback and support, are likely to motivate workers and decrease likelihood of exhaustion, burnout and destructive attitudes (Demerouti et al., 2001). In this way, it is evident that JD and JR are among the keys when it comes to maintenance of employee well-being in work places.

There are various demands in every workplace to be met and fulfilled. A manager who is alert and attentive towards JD and JR balance, provides employees with growth opportunities, meaning that the organization offers employees enough variety, independence and chances to use and learn new skills and knowledge and ensures support, a resource that refers to the relationship people have with their supervisors and colleagues, flow of information, communication, role clarity and participation in decision making. Advancement is a yet another important resource factor that includes career possibilities and training opportunities (Demerouti, 2001; Rothmann et al., 2006). These resources require a manager who is responsive, equitable and inclusive, giving subordinates feedback and involving them in important processes. Ensuring fair participation in decision-making, permitting all involved to express their feelings and opinions freely, is also important because consensus around basic structure and policies is essential in any organization to create a motivating work environment (Ólafsdóttir et al., 2013).

Another side to JR is that they are characteristics, objects and environmental conditions that are valued by employees as individuals. A central tenet is that people generally strive to obtain, retain and protect what they value. So, JR can be used as a management tool to appeal to people’s value systems and boost their self-confidence. Resources in an organization also induce critically important psychological states such as sense of meaningfulness, which can be a driving force behind employee’s attitudes and behaviors. Thereby, resources play an intrinsic motivational role and are instrumental in achieving goals and improving performances (Rothmann et al., 2006; Schaufeli & Bakker, 2004). It is worth mentioning that even with a relatively balanced level of demands and resources, the sub-factors of JD and JR should continuously be a matter of concern for managers in any organization, especially in highly client-oriented, public institutions providing society with such fundamental service as healthcare. A balance requires constant maintenance once it is found. Furthermore, Doyle and Hind (1998) found that employees who work under pressure, long hours with heavy work load, although
finding the work enjoyable, motivating and rewarding, these factors can still impact performances and the quality of service.

Summing this up, the management tools presented above, as well as imbalance between the levels of demands and resources, can and should be the focus of leaders and managers in hospitals because they are a route towards healthcare improvement. Managers need to actively monitor workloads and the relationship between supervisors and subordinates in order to reduce and manage stress. That way, managers would be monitoring sources of well-being at work, as well as satisfaction and commitment of employees. That can also be done by increasing sense of meaningfulness through ensuring constructive feedback, involvement, task variety, skill utilization and communication. These activities could assist in creating and maintaining attractive and motivating work environment and reduce the likelihood of people resigning (Firth et al., 2004). Many organizations, public and private, do not place great store on shaping their JD and JR as a means of improving satisfaction and performance. Thus, from a practical standpoint, I wanted my findings and literature review to demonstrate ways of impacting attitudes and well-being of healthcare professionals. A balanced level of JD and JR stimulates constructive attitudes and behaviors of hospital employees and leads to improvements in their well-being at work, which in turn is beneficial for the healthcare system at large.

**Conclusion**

This thesis contributes to increased knowledge of cross-cultural comparison of employee well-being in public hospitals. Firstly, the study demonstrates interesting differences between Iceland and Sweden that are partly attributed to the difference between the types of clinics in which data was collected. Secondly, on a practical level, this thesis reviews pathways through which the well-being of healthcare employees might be increased in times of financial restrictions by improving work conditions in hospitals. A dual strategy in hospital management is fundamental to do that as well as to retain professionals within their professions. That kind of management strategy refers to fair job demands, coupled with motivating and available resources. A balanced work environment correlates positively with well-being and self-efficacy, leading to commitment and good performance (DeBraine & Roodt, 2011). Thus, it is a way to create a motivating and
constructive work environment for healthcare professionals, maintain their well-being at work and thereby pave a way for quality services and high productivity (Demerouti et al., 2001; Ólafsdóttir 2012). In this respect, this study adds to current evidence base by suggesting that balance between demands and resources ought to be a core management quality and a fundamental focus of leaders and managers. Furthermore, this research will hopefully not only add understanding of the management value of balancing demands and resources but also how to efficiently assess and predict employee well-being in terms of methodology (Rothmann et al., 2006; Schaufeli & Bakker, 2004).

The main strengths of this research lie in its demonstration of the two parallel processes that can be used to build a quality work environment (demands and resources) as a way to improve employee well-being (personal efficacy and intention to quit). This combination of dependent variables compliments the multi-dimensionality of this research field as it includes both environmental and individual factors. Overall, this study also represents a theoretical step forward in existing literature about how healthcare in high-income countries reform and adjust to drastic changes, like financial crisis. Interesting results were revealed that call for further investigation and ways to improve management in healthcare were presented. In sum, this study aimed to make a contribution towards management, mainly with the acknowledgement of the important role played by environment characteristics at work that can improve employee well-being in public hospitals.
REFERENCES


