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# Female leaders' experiences of psychosocial working conditions and its health consequences in Swedish public human service organizations

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## Abstract

Municipal workplaces have high levels of sickness absence, and deterioration of the psychosocial work environment has been most pronounced for women and employees in this sector of Swedish working life. This study explores how female leaders in one rural municipality in Sweden experience their psychosocial working conditions and its health consequences. Interviews were carried out with 20 female leaders. Data were analyzed with a content analysis method using major dimensions of work stress models. These were job demands, job control, job resources, social support, and its health consequences. The analysis shows that the leaders experience high and conflicting job demands, limited possibilities to influence their work situation, insufficient job resources and social support, and limited time for their own health promotion. However, the leaders experience possibilities to develop skills in their jobs and opportunities to participate in educational programs. The analyses confirm the need for improvements in the prerequisites for female leaders in public human service organizations. It is important to improve female leaders' psychosocial working conditions by implementing a more narrow control range, increased personal and economical recourses, leadership support, and leader development programs.

**Keywords:** *Female leaders; psychosocial working conditions; job demands; job control; job resources; social support; health consequences; human service organizations*

Swedish investigations carried out in recent years have revealed that public sector and municipal workplaces have the highest levels of sickness absence, and deterioration of the psychosocial work environment has been most pronounced for women and employees in this sector of working life (Danielsson et al., 2012; Karolinska Institutets folkhälsoakademi, 2009; Lidwall & Marklund, 2006). According to several researchers, these developments are related to organizational changes within public sector organizations that have involved streamlining and

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role changes for employees (Hansson, Vingård, Arnetz, & Anderzén, 2008; Härenstam & MOA Research Group, 2005). Downsizing and structural changes within organizations may have adverse physical and psychological effects on coworkers' and leaders' health, signaled by poor health, increased stress, and sick leave among other factors (Hansson, Vingård, Arnetz, & Anderzén, 2008; Härenstam & MOA Research Group, 2005). Further, working conditions in public sector organizations are complex and are affected by several different control systems, political decision processes, and formal and informal rules (Björklund, Karlsson, Jensen, Hagberg, & Bergström, 2011).

In Swedish working life, there are around 500 000 leaders at different levels (Ledarna Sveriges chefsorganisation, 2009) and approximately 37 000 of these are employed in municipalities and county councils (Lutz & Olsson, 2011). It is also notable that men hold 73% and women 27% of management positions in Swedish working life (Statistics Sweden, 2010). Few empirical studies have focused on public human service organization leaders, their stress and coping strategies for handling their working situation (Skagert, Dellve, Eklöf, Pousette, & Ahlberg, 2008). This is somewhat surprising given that a leader's psychosocial working conditions and behaviors are important for both organizational outcomes, such as effectiveness and quality (Yukl, 2009), and individual outcomes, such as health and well-being among employees (Nyberg, Bernin, & Theorell, 2005). The individual well-being of leaders can also be viewed as a resource (Bowling, 2005) that can be used for developing workplaces and

employees. It can be hypothesized that the health and working conditions of female leaders in rural municipalities are particularly important due to limited resources for developing these workplaces.

### **PSYCHOSOCIAL WORKING CONDITIONS AND ITS HEALTH CONSEQUENCES AMONG LEADERS IN HUMAN SERVICE ORGANIZATIONS**

Being a leader is related to having a high level of responsibility, having to make unpopular decisions and being the center of attention (Skakon, Nielsen, Borg, & Guzman, 2010). Work can require a relentlessly high tempo, while the context for work is varied and fragmented; many activities are reactive, interactions involve a great deal of oral communication, decision processes are disorderly and political, and most planning is informal and adaptive (Yukl, 2009). Especially in politically ruled human service organizations, the lack of clarity surrounding a leader's role, responsibility, and decision latitude may create special demands that influence the leader's perceived opportunities and strategies (Skagert et al., 2008). This undefined role is complicated by various conflicting demands that can lead to high levels of job strain and stress (Dellve & Wikström, 2009; Maslach, Schaufeli, & Leiter, 2001; Pousette, 2001).

Leaders in human service organizations often work under high pressure with high job demands but low decision latitude and limited space for acting (Pousette, 2001; Skagert et al., 2008). Leaders in public human service organizations face difficulties in handling workplace stressors such

as informal and formal demands, low decision latitude, and poor management support in both every day and extraordinary situations, and they have little opportunity to communicate work environment problems to strategic decision makers (Skagert et al., 2008). Rodman and Bell (2002) show that health care leaders operate in a culture of expectation of work stress, and that their stress is related to overload, interruption, responsibility, and relationships. According to Bernin (2002), stress and stress-related diseases have increased in recent years, and female leaders report higher psychological demands and intellectual demands than other professional groups. They also use coping behavior which may increase the risk of illness, and they also encounter greater difficulties with relaxing outside of work when compared with male leaders (Bernin, 2002). This is in line with results indicating that many female leaders identify the stress of balancing work and family, and the inter-conflict that this creates, as one of their biggest problems (Harte, 1996).

According to Björklund et al. (2011), female public sector leaders reported problematic psychosocial working conditions and scored their self-rated health and lifestyle lower than corresponding male leaders. A study of social services leaders and social workers concerning the nature of job commitment, satisfaction, stress, and control found no major discrepancies between the groups (McLean & Andrew, 1999). However, in a Danish study that included municipal workplaces (Skakon et al., 2010), results revealed that leaders experienced higher demands, higher levels of conflict, a lower degree of social support from peers, and lower emotional stress than other

employees. These results partly contradict the lay perception that leaders are more stressed than employees (Skakon et al., 2010).

In summary, research shows that there are specific psychosocial working condition issues in Swedish public human service organizations. Research results concerning female human service leaders' psychosocial working conditions and health are to some extent contradictory, but there seems to be a consensus that women in management are exposed to demanding psychosocial working conditions. However, there are also research studies showing that human service leaders report similar or better stress-related health outcomes than human service coworkers. It is important to gain a deeper understanding of public human service leaders' psychosocial working conditions and its health consequences in this sector of working life.

## **PERSPECTIVES**

Research on negative health consequences of psychosocial work environment factors among employees has identified key factors related to demands (work overload and pressure, conflicting demands), control (lack of control over work, lack of participating in decision making), and social support (poor social support) (Michie & Williams, 2003).

One of the leading models describing psychosocial job characteristics and their relationship to health and well-being is the "Job Demand–Control–Support Model" (Johnson & Hall, 1988; Karasek & Theorell, 1990). According to this model, situational workplace characteristics, such as psychological job demands

and levels of job control, interact and affect the worker's foundations for personal development and psychological strain. Job demands refer to those factors that are related to time pressure, mental load, and coordination responsibilities. Job control comprises two components: decision authority and skill discretion. Decision authority is a socially agreed upon form of control over job performance that allows the employee to decide how and when the job task is to be completed. Skill discretion refers to control over the use of the employee's initiative and skills on the job. A third component of the model, that is, social support, was added to the model by Johnson and Hall (1988). Social support refers to the social climate at work and the possibility to get support from supervisors and colleagues when it is needed. According to the demand-control-support model, a combination of high job demands, low job control, and lack of social support is the worst job situation when it comes to effects on employee health and well-being. Research reviews and meta-analyses have shown that there is strong scientific evidence of an association between this job situation and cardiovascular disease (e.g. Eller et al., 2009; Kivimäki et al., 2008). A high level of control over one's work situation, manageable work demands, and extensive social support are crucial factors for experiencing a high level of job satisfaction and well-being (de Lange, Taris, Kompier, Houtman, & Bongers, 2003; Karasek & Theorell, 1990; Sundin, 2009).

A further developed model is the "Job Demands-Resources Model" (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). This model proposes

that psychosocial working conditions can be categorized into two broad categories, job demands and job resources, which are differentially related to specific outcomes. Job demands are primarily related to exhaustion component of burnout, whereas lacks of job resources are primarily related to disengagement (Demerouti et al., 2001). Job demands refer to those physical, social, or organizational aspects of a job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs, for example, exhaustion. Job resources refer to those physical, psychological, social, or organizational aspects of the job that are related to possibilities of achieving work goals, personal growth, and development (Demerouti et al., 2001). Burnout was originally considered to occur exclusively in human service occupations, and job engagement is assumed to be the positive antipode of burnout (Schaufeli & Bakker, 2004).

## AIM

The purpose of the study is to explore how female leaders in Swedish public human service organizations experience their psychosocial working conditions and its health consequences. This is done by analyzing the following research questions:

- How do female leaders in Swedish public human service organizations experience job demands, job control, job resources, and social support in their work?
- What health consequences do female leaders experience due to their psychosocial working conditions?

## **METHOD**

The female leaders studied were employed at different workplaces in one Swedish rural municipality in the middle of Sweden with around 7500 inhabitants. Approximately 1100 persons are employed with the municipality, and most of them work for public health service organizations within health care and the school sector.

In recent years, the municipality chose to carry out health promotion programs covering health and analysis of work environments, leadership education, improvements in physical and psychosocial work environment, wellness, and flexible working hours. Human resource staff contributed to this work by recruiting informants through different management forums in the form of oral information about the study and distributing written letters of invitation from us. A total of 20 female leaders aged 40–61 agreed to be interviewed. Leaders were from organizations involved with social services, healthcare, care, childcare, and education. Many leaders had been managers within different municipal units for many years (5–34 years). The interviews were conducted in municipal offices, and all participants agreed to the interview being recorded.

### **Interviews**

Interviews with female leaders in Swedish public human service organizations were carried out. The interviews lasted between 1.5 and 2 hours and followed a questionnaire guide with semi-structured questions. The interview guide covered questions about the leader's experience of psychosocial working conditions,

such as job demands, job control, job resources, and social support, and their consequences on his/her health (Demerouti et al., 2001; Johnson & Hall, 1988; Karasek & Theorell, 1990). Two researchers were present at each interview; the first posed questions while the second researcher took notes to compliment the primary data and managed technical equipment. All interviews were recorded and transcribed verbatim. Transcriptions for interviews varied from 45 to 70 pages, for a total of 1200 pages. The transcribed interviews were analyzed in accordance with a content analysis method (Graneheim & Lundman, 2004; Lundman & Hällgren Graneheim, 2008). The analyses are based on aspects related to the models Job Demand–Control–Support and Job Demands–Resources. Using content analysis, we describe variations by identifying similarities and differences in textual content. These are expressed through categories where context is of importance. The interpretation of texts therefore presumes knowledge of the context within which a study is carried out (Lundman & Hällgren Graneheim, 2008). For example, the present interview study was conducted in a rural context.

In a first step, each researcher independently read through the entire interview text twice and took notes to gain a sense of the entirety sorting the text into meaning units. These comprised words, sentences, and segments of text that belong together on the basis of their content. Appropriately sized meaning units provided the basis for analysis. In a second step, the material was condensed to shorten the text, making it more manageable, while retaining the key content (3–6 pages of text for each interview

transcript). In a third step, the material was coded, that is, we sorted it into units and worked to identify patterns, that is, similarities and differences in the material. In this step in the analysis, the content of the text was categorized. We discussed our interpretations until consensus was reached (Lundman & Hällgren Graneheim, 2008; Patton, 2002).

### **Ethical considerations**

Before interviews began, informants were given information regarding the study and its aims and were informed that their participation was voluntary and that they could drop out of the study at any point without citing a reason (Lagom etikprövning, 2003, p. 460). Participants provided oral informed consent. Data were handled confidentially, meaning that the content is presented here in a way that makes it impossible to link actual individuals to what was said, and no one outside the project has had access to the materials.

## **FINDINGS**

We have analyzed the interview data in relation to the four categories—job demands, job control, job resources and social support, and health consequences. The categories originated from the previously described work stress models in the introduction section.

### **Job demands**

The analyses show that a majority of the leaders experience very high job demands and conflicting demands from

politicians, senior officials, employees, users, and sometimes from relatives.

IP 9: ... and there are also difficulties in being a manager since you also want to be loyal to the broader organization, and to the head of the municipality and politicians. And there isn't enough money – and so you have to try to make the speech that – yes, but we need to have this and this.

Several leaders manage a large number of employees. Consequently, they experience that they often are not available to their staff. A majority of the leaders point out that high job demands mean irregular and long working days.

Over the course of several years, organizational and locational changes were usual. The analysis showed that extensive and repeated improvements in municipal work during recent years have resulted in change fatigue among both the leaders who were interviewed and their staff. In response to questions regarding their visions for the future for their own organizations, there were few leaders who were able to clearly articulate such. This was explained by several interviewees to be the result of ongoing changes and reorganizations that drained their energy from future-oriented discussions and goals.

IP 1: What I feel right now is that we have to arrive somewhere finally ... There has to be an end to warnings so you can stop feeling concerned about being made redundant and losing your job. I think it has permeated all of our work quite a bit – we have to get to a platform somewhere so we know that this is how it is now.

## **Job control**

Many of the leaders experience limited possibilities to influence their work situation due to organizational changes, insufficient economical resources and demands from politicians, senior officials and the governmental level.

IP 5: ... we brought it up on the most recent planning day that we never have the chance to be employees. Like, we never bring up what bothers us, how we work.

Interviewer: What do you mean by that?

IP 5: We receive orders to do things – we are seldom employees (emphasises the word employee).

Interviewer: Yes.

IP 5: I mean work with ourselves and our leadership, there is no time for it.

However, the leaders also express that their position as a middle-manager provides possibilities for a more flexible work schedule. This means that they, to a greater extent, can choose when and where to perform certain work tasks. Unfortunately, this often meant that the leaders worked too much. A pattern was that experienced leaders could more easily set boundaries between work and leisure time. The leaders also express possibilities to learn new things and to develop new skills in their jobs.

The analysis showed that a majority of leaders had a positive outlook on people and believed in employee competence and abilities, their sense of responsibility, and willingness to participate in development work.

IP 19: My view of staff is that they are grownups that have both imagination and competence. Basic values are that people are at work

because they want to be at work and that they want to achieve something and that they have something to contribute.

## **Job resources and social support**

Leaders are often alone in their management role, which several experienced as difficult. Several leaders experienced that they received support through different educational measures directed to managers. However, they did not experience ongoing support of this type.

IP 7: You don't have the energy for just anything when it comes to personal development because it's, it's pretty difficult.

Interviewer: Mhm, what do you mean by that?

IP 7: You need to have it portioned out so that it is easier to repeat at regular intervals.

Several of the leaders were looking for a better link for their leadership between colleagues and managers above them. One positive condition that several noted was that there were multiple arenas for exchanging experiences with other managers at a similar level, through regular meetings held every other week. However, several of the managers felt that these meetings seldom focused on their own work situation.

The analysis revealed that many leaders manage several units, which are sometimes scattered across different geographic areas. Several leaders noted that they spend a large portion of their work time in their cars, travelling between different units, which make it difficult to find time to support employees.

IP 9: Where there is no manager on site, they have a tendency to start living their own lives, start

creating their own rules. Not unusual for conflicts to arise, like a bit of bullying.

Because the municipalities are relatively small there is a “closeness” among leaders that is experienced as positive. Many of the leaders were recruited from the one organization and have long seniority within the municipality.

The analysis revealed that a majority of the leaders experience advantages in the municipality using the same model for analyzing health, ill-health, and psychosocial work environment. This makes it possible to compare workplaces with one another and to also follow developments over time within one’s own workplace and municipality. The latter is regarded by several as a good basis for prioritizing different measures. However, it was also noted that it can be difficult to determine which measures are relevant and which can lead to positive effects on employee health and organizational development. Several leaders noted a need for support and assistance in interpreting changes in the variables used for the analysis. A relationship that several people touched upon was the need for leadership competence with respect to work environment and health promotion measures since annual changes in the content of the work to be carried out creates instability and concern among employees as well as those in management positions.

Interviewer: So what you are saying is that those of you who are unit managers face a very difficult work situation and that you do not have enough support with promotion work, or?

IP 20: We receive lots of support (sounds resigned), how can I ex-

plain this (thinks) – we get a lot of measures. If we have a poor health report we say, we are at minus 3 or something, and you come in and say – yes, but we have to look at this, this can’t be right – and efforts are made at an individual level. As if it is the individual there is something wrong with who cannot manage his work. One looks much less at which resources we have in order to carry out work, how many employees we have and how many groups we have. It is more difficult to look at the organization than at the individual.

Concerning job resources, a repeated aspect was also the lack of financing and human resources to carry out health promoting measures in the workplace, even if an awareness and willingness to improve was present.

### **Health consequences**

The analysis revealed that several of the leaders have an earlier history of psychosocial related illness, when they have been away from work for long periods of time and have returned to more or less the same working conditions after their sick leave. There is a conscious awareness among the leaders of the risk of falling into long-term sick leave once again, which hangs over them. Several leaders also referred to early signals of stress-related ill-health.

IP 4: ... then I realized that when I returned from my holiday I was going to be alone, no assistant and no manager – I would have the assistant job and everything and then I felt I just couldn’t do it. I stopped before I hit the wall this time.

The analysis revealed that several leaders experience frustration over having limited time for their own health promotion efforts. A substantial workload made it difficult to find both time and energy to train and engage in physical activity both in and outside work. Several respondents pointed to difficulties in puzzling together their lives, that is, in balancing work demands with family and leisure activities.

## **DISCUSSION AND CONCLUSION**

The purpose of this study was to explore how female leaders in public human service workplaces experience their psychosocial working conditions and its health consequences. This is an important research area due to the fact that the prerequisites for leadership are of relevance for both employee outcomes such as well-being and health (e.g. Nyberg, Bernin, & Theorell, 2005), and for organizational outcomes related to quality and effectiveness (e.g. Yukl, 2009). Also, services in public sector organizations are of great importance for employment and regional and local development (Zerbinati & Souitaris, 2005).

The analysis uncovers a rather gloomy picture of what it is like to be a female leader in public human service organizations in Sweden. The demanding psychosocial working conditions involving conflicting demands and insufficient social support that the female leaders experience can negatively influence a personal work-life balance and possibilities for recovery, which in turn increases the risk of ill-health (Herlofsson et al., 2009; Zijlstra & Sonnentag, 2006)

and exhaustion components of burnout (Demerouti et al., 2001).

The fact that the leaders experience limited possibilities to influence their work situation is in line with other research (Pousette, 2001; Skagert et al., 2008). Extensive research shows that a combination of high job demands and low job control means risks for several ill-health outcomes (Eller et al., 2009; Karasek & Theorell, 1990; Kivimäki et al., 2008). However, the fact that the leaders also report that they learn new things in their jobs and that they receive education may partly balance out their limited possibilities for decision authority.

That several leaders experience incipient illness, and that some leaders have a previous sick leave history, points to the importance of measures in this area. The analysis shows that almost every leader experiences a lack of time for investing in their own health, such as wellness training and participating in social networks outside work. They also point to difficulties in balancing work and family life demands and leisure activities. These facts strengthen the need for both psychosocial working condition improvements, social support, and individually based health promotion activities for such leaders. Social support from individuals and networks are probably important tools for leaders in managing their role requirements and the strains associated with them (Skagert et al., 2008).

The analysis shows that female leaders in the Swedish public sector experience a lack of sufficient preconditions. This is due to several organizational changes that took place in recent years, that they are

leaders of large groups who also face conflicting demands from politicians, leaders in higher positions, employees, users of services and relatives. This is in line with other research (Hansson et al., 2008; Härenstam & MOA Research Group, 2005; Skagert et al., 2008). Other studies show that broad control range (being a leader for many employees) can negatively affect a leader's efficiency, psychosocial working conditions, and job satisfaction (Altaffer, 1998). Worries about organizational changes are positively related to increased long-term sickness in municipalities (Szűcs, Hemström, & Marklund, 2003). Also, studies show that leaders comprise a very ambitious group in working life, and their own demands of self are higher than those of average employees (Ekstedt, 2008). These ambitions might contribute to an imbalance between work and private life, which in turn can erode the leader's job satisfaction (Innstrand, Langballe, Espnes, Aasland, & Falkum, 2010). According to Connel (2009), the leadership norms as well as the work itself are part of society's wider patterns with respect to gender. Being a female leader could be more challenging than being a male leader, and thus there may be differences between male and female leaders on the basis of working conditions and the possibility of maintaining an appropriate work-life balance (Skagert, 2010). However, being a female leader in female dominated organizations may conflict less with gender stereotypes than in male dominated organizations (Heilman & Okimoto, 2007).

A majority of the leaders point out several advantages of using the same model for analyzing employees' working conditions, and health and sickness

absence across organizations. However, many leaders state that it is problematic to judge what strategies and measures should be adopted in their workplace to promote health. Other obstacles for successful processes are a lack of knowledge about workplace health promotion, fatigue resulting from constant change management, and not having visions for the future development of their workplace. The analyses show that most of the leaders experience lack of support in their leadership role. Research shows that social relations both upward and downward are of great importance for leaders' health and well-being in municipal workplaces (Härenstam & Bejerot, 2010). Extensive research supports the importance of social support for balancing high job demands (Karasek & Theorell, 1990). Also, the amount of job resources for achieving work goals is crucial for the leaders' engagement in work (Demerouti et al., 2001).

The analysis confirms the need for improvements in the prerequisites for female leaders in public human service organizations. There are several policy implications to be gleaned from our study. It is important to focus to a greater degree on leaders' psychosocial working conditions and health, and to remove identified hindrances for workplace health promotion processes. For this to be possible, leaders' psychosocial working conditions must be improved, for example, by implementing a more narrow control range, increased personnel and economic resources, and leadership support. It is also necessary to increase leaders' knowledge about their own health and how to promote their own health. Support from superiors, colleagues, occupational health services, and

other consultants is important here. Efforts to improve conditions for public human service organization leaders should focus on both the individual and organizational levels—an improved work organization with reasonable job demands, high job control, and sufficient job resources together with, for example, physical exercise and social activities outside work. Also, a practical implication is that leader development programs should focus on both education and frequent reflections on psychosocial working conditions and health promoting factors over longer time periods. Research shows that such programs could reduce stress hormone levels and increase job control among both leaders and their subordinates (Dellve, Skagert, & Vilhelmsson, 2007; Romanowska et al., 2011; Theorell, Emdad, Arnetz, & Wingarten, 2001).

In conclusion, female leaders are exposed to conflicting demands and insufficient support from, for example, colleagues and managers above as well as from a political level. This, together with lack of sufficient job resources, such as personnel and financial resources, can negatively influence their work–life balance and possibilities for recovery. Another conclusion is that there are both advantages and disadvantages of a municipality that is relatively small and active in a rural context. There is closeness among leaders of different units, and at the same time there are limited resources and great distances to be crossed. This proximity could be better taken advantage of in health promotion measures across different work groups and units. The female leaders seem to be conscious of the risks of ill-health and the behaviors that promote psychosocial

health in the workplace, but they lack the tools to transform this awareness into concrete action.

### **Methodological considerations**

When interpreting our results, some account must be taken of the fact that this study is based on a relatively small sample size, and the findings must therefore be interpreted with caution. However, the purpose of qualitative research is not to extend findings derived from selected samples to people at large, but rather to transform and apply them to similar situations in other contexts (Polit & Beck, 2004). When analyzing the data, we have used well-developed work stress models (Demerouti et al., 2001; Karasek & Theorell, 1990; Johnson & Hall, 1988) to explain relations between psychosocial working environmental factors and its health consequences. These models have been developed through extensive research over many years. It is important to recall that a particular interpretation is one of many possible interpretations, but we judge the findings in this study to be transferrable to female leaders in other public human organizations in rural areas. Our findings are, to a large extent, supported by earlier research. The strength of the study is that the leaders represented different public human service workplaces in the same rural area.

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## CONFLICT OF INTEREST AND FUNDING

There is no conflict of interest among the authors.

## REFERENCES

- Altaffer, A. (1998). First-line managers: Measuring their span of control. *The Journal of Excellence in Nursing Leadership*, 29(7), 36–40.
- Bernin, P. (2002). *Managers' working conditions—stress and health* (Thesis). Karolinska institutet, Stockholm.
- Björklund, C., Karlsson, M.L., Jensen, I., Hagberg, J., & Bergström, G. (2011). *Chefers hälsa och psykosociala arbetsmiljö i kommuner och landsting. Hierarkier av hälsa* [Managers' health and psychosocial working conditions in municipalities and county councils. Hierarcisies of health]. Stockholm: Karolinska institutet. Retrieved from <http://www.suntliv.nu/PageFiles/11035/Slutrapport%20chefers%20h%C3%A4lsa.pdf>
- Bowling, A. (2005). *Measuring health—A review of quality of life measurement scales*. Berkshire: Open University Press.
- Connel, R. (2009). *Gender*. Cambridge: Polity.
- Danielsson, M., Heimerson, I., Lundberg, U., Perski, A., Stefansson, C.-G., & Åkerstedt, T. (2012). Psychosocial stress and health problems: Health in Sweden: The National Public Health Report 2012. Chapter 6. *Scandinavian Journal of Public Health*, 40(9), 121–134.
- de Lange, A.H., Taris, T.W., Kompier, M.A.J., Houtman, I.L.D., & Bongers, P.M. (2003). The very best of the millennium: Longitudinal research and the demand-control-(support) model. *Journal of Occupational Health Psychology*, 8(4), 282–305.
- Dellve, L., Skagert, K., & Vilhelmsson, R. (2007). Leadership in workplace health promotion projects: 1- and 2-year effects on long-term work attendance. *European Journal of Public Health*, 17, 471–476.
- Dellve, L., & Wikström, E. (2009). Managing complex workplace stress in health care organizations: Leaders' perceived legitimacy conflicts. *Journal of Nursing Management*, 17(8), 931–941.
- Demerouti, E., Bakker, A.B., Nachreiner, F., & Schaufeli, W.B. (2001). The job demands—resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512.
- Ekstedt, E. (2008). *Att leda chefer. Stöd och inspiration* [To lead managers. Support and inspiration]. Solna: Elanders Sverige AB.
- Eller, N.H., Netterstrom, B., Gyntelberg, F., Kristensen, T.S., Nielsen, F., Steptoe, A., & Theorell, T. (2009). Work-related psychosocial factors and the development of ischemic heart disease: A systematic review. *Cardiological Review*, 17(2), 83–97.
- Graneheim, U.H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 44, 105–112.
- Hansson, A.-S., Vingård, E., Arnetz, 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.
- Harte, S. (1996). Women who work it out. *Atlanta Journal Constitution*. p. C1.
- Härenstam, A., & Bejerot, E. (2010). *Sociala relationer i arbetslivet. Studier från föränderliga arbetsplatser* [Social relations in working life. Studies from changable work places]. Malmö: Gleerups.
- Härenstam, A., & MOA Research Group. (2005). Different development trends in working life and increasing occupational stress require new working environment strategies. *Work: A Journal of Prevention, Assessment and Rehabilitation*, 24(3), 261–277.
- Heilman, M.E., & Okimoto, T.G. (2007). Why are women penalized for success at male tasks?: The implied communality deficit. *Journal of Applied Psychology*, 92(1), 81–92.

- Herlofsson, J., Exelius, L., Lundh, L.-G., Lundin, A., Mårtensson, B., & Åsberg, M. (2009). *Psykiatri* [Psychiatry]. Lund: Studentlitteratur.
- Innstrand, S.T., Langballe, E.M., Espnes, G.A., Aasland, O.G., & Falkum, E. (2010). Personal vulnerability and work-home interaction: The effect of job performance-based self-esteem on work/home conflict and facilitation. *Scandinavian Journal of Psychology*, 51(6), 480–487.
- Johnson, J.V., & Hall, E.M. (1988). Job strain, work place social support, and cardiovascular disease: A cross-sectional study of a random sample of the Swedish working population. *American Journal of Public Health*, 78, 1336–1342.
- Karasek, R., & Theorell, T. (1990). *Healthy work: Job stress, productivity and the reconstruction of working life*. New York: Basic Books.
- Karolinska Institutets folkhälsoakademi (2009). *Arbetsförhållanden, levnadsvanor och hälsa inom vård och omsorg (Rapport 2009: 24)* [Working conditions, living conditions and health within health care sector]. Stockholm: Karolinska Institutets folkhälsoakademi.
- Kivimäki, M., & Vathera, J., Elovaino, M., Keltikangas-Jarvinen, L., Virtanen, M., Hintsanen, M., ... Ferrie, J. (2008). What are the next steps for research on work stress and coronary heart disease?. *Scandinavian Journal of Work Environment and Health Supplement*, 6, 33–40.
- Lag om etikprövning av forskning som avser människor [Act on ethical approval on research on human beings] (2003: 460), §§ 16–17, 19. Retrieved from <http://www.notisum.se/rnp/sls/lag/20030460.htm>
- Ledarna Sveriges chefsorganisation. (2009). *Chefen i siffror 2009* [The manager in numbers 2009]. Retrieved from [http://www.ledarna.se/web/open/fileStream?path=%2FLedarna%2Fimages%2Fpdf%2Fpdf\\_press%2Fchefen\\_i\\_siffror\\_2009.pdf](http://www.ledarna.se/web/open/fileStream?path=%2FLedarna%2Fimages%2Fpdf%2Fpdf_press%2Fchefen_i_siffror_2009.pdf)
- Lidwall, U., & Marklund, S. (2006). What is healthy work for women and men?—A case-control study of gender- and sector-specific effects of psycho-social working conditions on long-term sickness absence. *Work: A Journal of Prevention, Assessment & Rehabilitation*, 27(2), 153–163.
- Lundman, B., & Hällgren Graneheim, U. (2008). Kvalitativ innehållsanalys [Qualitative content analysis]. In M. Grankär & B. Höglund-Nielsen (Red.), *Tillämpad kvalitativ forskning inom hälso-och sjukvård* [Applied qualitative research in the health care sector] (pp. 159–171). Lund: Studentlitteratur AB.
- Lutz, Ö., & Olsson, S. (2011). *Chefer i kommuner och landsting* [Managers in municipalities and county councils]. Stockholm: Sveriges kommuner och landsting. Retrieved from [http://www.skl.se/press/nyheter\\_2/nyheter-2011/chefsvaxling-i-kommuner-och-landsting](http://www.skl.se/press/nyheter_2/nyheter-2011/chefsvaxling-i-kommuner-och-landsting)
- Maslach, C., Schaufeli, W., & Leiter, M. (2001). Job burnout. *Annual Review Psychology*, 52, 397–422.
- McLean, J., & Andrew, T. (1999). Commitment, satisfaction, stress and control among social services managers and social workers in the UK. *Administration in Social Work*, 23(3–4), 93–117.
- Michie, S., & Williams, S. (2003). Reducing work related psychosocial ill health and sickness absence: A systematic literature review. *Occupational and Environmental Medicine*, 60(1), 3–9.
- Nyberg, A., Bernin, P., & Theorell, T. (2005). The impact of leadership on the health of subordinates (SAL TSA, Rapport nr. 1). Stockholm: Arbetslivsinstitutet.
- Patton, M.Q. (2002). *Qualitative evaluation and research methods* (3rd ed.). Newbury Park: Sage.
- Polit, D.F., & Beck, C.T. (2004). *Nursing research, principles and methods* (7th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.
- Pousette, A. (2001). *Feedback and stress in human service organizations* (Thesis, Department of Psychology). Göteborg University, Göteborg.
- Rodman, K., & Bell, J. (2002). Work stress: An explanatory study of practices and perceptions of female junior health care managers. *Journal of Nursing Management*, 10(1), 5–11.

- Romanowska, J., Larsson, G., Eriksson, M., Wikström, B.-M., Westerlund, H., & Theorell, T. (2011). Health effects on leaders and co-workers of an art-based leadership development program. *Psychotherapy and Psychosomatics*, *80*, 78–87. doi:10.1159/000321557
- Schaufeli, W.B., & Bakker, A.B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, *25*, 293–315. doi:10.1002/job.248
- Skagert, K. (2010). *Leadership in human service organisations: Conceptions, strategies and preconditions to promote and maintain health at work* (Thesis). University of Gothenburg, Gothenburg.
- Skagert, K., Dellve, L., Eklöf, M., Pousette, A., & Ahlberg, G. (2008). Leaders' strategies for dealing with own and their subordinates' stress in public human service organisations. *Applied Ergonomics*, *39*, 803–811.
- Skakon, J., Nielsen, K., Borg, V., & Guzman, J. (2010). Are leaders' well-being, behaviors and style associated with the affective well-being of their employees? A systematic review of three decades of research. *Work & Stress*, *24*(2), 107–139.
- Statistics Sweden. (2010). *Andel kvinnor och män i chefspositioner*. [Proportion of women and men in management positions]. Retrieved June 28, 2012, from [http://www.scb.se/Pages/TableAndChart\\_\\_\\_\\_133985.aspx](http://www.scb.se/Pages/TableAndChart____133985.aspx)
- Sundin, L. (2009). *Work-related social support, job demands and burnout: Studies of Swedish workers, predominantly employed in health care* (Thesis). Karolinska institutet, Stockholm.
- Szücs, S., Hemström, Ö., & Marklund, S. (2003). *Organisatoriska faktorerens betydelse för långa sjukskrivningar i kommuner* [The importance of organizational factors for long-term sick leave in municipalities]. Stockholm: Arbetslivsinstitutet.
- Theorell, T., Emdad, R., Arnetz, B., & Wingarten, A.-M. (2001). Employee effects of an educational program for managers at an insurance company. *Psychosomatic Medicine*, *63*, 724–733.
- Yukl, G. (2009). *Leadership in organizations*. London: Prentice Hall.
- Zerbinati, S., & Souitaris, V. (2005). Entrepreneurship in the public sector: A framework of analysis in European local governments. *Entrepreneurship & Regional Development*, *17*, 43–64.
- Zijlstra, F.R.H., & Sonnentag, S. (2006). After work is done: Psychological perspectives on recovery from work. *European Journal of Work and Organizational Psychology*, *15*(2), 129–138.