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# Operational manager's perceptions and interventions for work-related stress concerning nurse assistants who work in elderly home care

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Abstract

Work-related stress can be recognized as a widespread phenomenon that influences individuals, organizations, and society. Stress and work-related stress are complex issues that involve and are influenced by different factors at different levels. This exploratory study aimed to get a deeper understanding of operational managers' perceived assumptions regarding work-related stress for nurse assistants who work in elderly home care in different municipalities. Additionally, this thesis attempted to identify the municipalities' organizational and individual interventions and investigate how they evaluate the effectiveness of these interventions. Applying the qualitative method with deductive reasoning and using semi-structured interviews (N=5) resulted in two core categories "*multiple dimensions of stress and stress interventions*" and "*lack of effective tools*". The operational managers expressed that there is continuous a challenge to getting more budget from government to implement more effective interventions, however, they claimed that individuals' lifestyles and situations can not be ignored. Moreover, analyzing respondents' interviews indicated that there is a lack of effective tools to evaluate organizational effectiveness. Finally, according to all respondents, municipalities do not have regular leadership training for unit managers or healthy workshops for nurse assistants to promote healthy working conditions. This study highlighted the importance of interdisciplinary approaches in investigating work-related studies including political power relations and economic contexts.

*Keywords: Work-related stress, job demand, reward system, leadership, organizational interventions.*

Sammanfattning

Arbetsrelaterad stress kan ses som ett utbrett fenomen som påverkar individer, organisationer och samhället. Stress och arbetsrelaterad stress är komplexa frågor som involverar och påverkas av olika faktorer på olika nivåer. Syftet med föreliggande studie var att få en djupare förståelse av verksamhetschefernas upplevda perception om arbetsrelaterad stress gällande undersköterskor som arbetar inom äldreomsorgen i olika kommuner. Dessutom har denna uppsats försökt identifiera kommunernas insatser i både individ och organisationsnivå samt undersöka hur verksamhetschefer utvärderar effektiviteten av dessa insatser. Kvalitativ metoden med deduktiva resonemang tillämpades och användning av semistrukturerade intervjuer (N=5) resulterade i två kärn kategorier *"flera dimensioner av stress- och stress interventioner"* och *"brist på effektiva verktyg"*. Verksamhetscheferna uttryckte att det finns ständiga utmaningar för att få mer budget för att genomföra effektivare insatser, men de hävdade att individers livsstil och situation inte kan ignoreras. Dessutom indikerade analysen av respondenternas intervjuer att det saknas effektiva verktyg för att utvärdera organisationens effektivitet. Slutligen, enligt alla tillfrågade, har kommuner inte regelbunden ledarskapsutbildning för enhetschefer eller hälsofrämjande workshop för undersköterskor för att främja hälsosamma livsstil. Denna studie underströk vikten av tvärvetenskapliga tillvägagångssätt för att undersöka arbetsrelaterade studier inklusive politiska maktrelationer och ekonomiska sammanhang.

*Nyckelord: Arbetsrelaterad stress, Arbetsbelastning, Belöningssystem, Ledarskap, Organisatoriska interventioner.*

Acknowledgement

**Operational manager's perceptions and interventions for work-related stress concerning nurse assistants who work in elderly home care**

The levels of perceived work-related stress have increased over time globally and some of its underlying reasons refer to globalization, financial constraints, changes in communication technology, or employment insecurity (Siegrist & Li, 2016). Regarding organizational working environments, the common mental ill-health is related to stress, depression, and anxiety which results in enormous negative consequences in terms of sickness, absence, and lost productive value. The problem is not limited merely to stress-related absence but presenteeism is also rising significantly in the world. Presentism means that the employees go to work ill but they contribute no added value (Dewe & Cooper, 2017; Cooper et al., 2009).

The Swedish Work Environment Authority indicates that work-related ill-health as a result of stress and other psychological ill-health is increasing in comparison with illness due to physical workload for employees, especially for women (Arbetsmiljöverket, 2016). Hassard et al. (2018) during a systematic review of the evidence, give us a dark picture of the vast economic consequences of work-related stress on society in terms of medical and healthcare costs or productivity-related loss. Sick leave due to work-related ill-health varies during different occupations. According to AFA Insurance (2020), work-related ill-health is more common in occupations such as school teachers, social workers, nurses, and nurse assistants. In line with this notion Swedish Work Environment Authority reports that by considering full-time employees, a total of 6,200 nurse assistants are on sick leave all year round. 6,200 out of 105,000 full-time employees never come back to work again. Sweden's work Environment Authority indicates that more than four out of ten nurses and nurse assistants have work-related health problems such as burnout (Arbetsmiljöverket, 2018).

In line with aforementioned, Rydenfält et al. (2020) emphasize the need for more home care in many countries due to the growing elderly population. During a systematic literature review, these authors highlighted that there is a need to increase the workforce in eldercare in Sweden by 170,000 people by 2035, however, the problems in terms of sick leave, stress and staff turnover are considered common issues in this occupation. In Sweden, nurse assistants had the highest number of cases resulting in long-term sickness absence in the year 2014 (Rydenfält et al, 2020). A nurse assistant's difficult working environment is even highlighted by other scholars as well. Sjöberg et al. (2020) argued about high workload both physical and psychological, burnout, high rate of sick leave and stress of conscience. Szebehely et al. (2017) elaborated more on the high workload concerning the nurse assistant's working environment and claimed that the number of patients a nurse assistant must meet during one workday has increased drastically nurse assistants on average must assist almost 13 patients per day.

Elderly home care is governed by the state via regulations and rules in Sweden, whereas the municipalities are responsible for providing the service to citizens including elderly people and it is municipalities that provide the funding as well (Rydenfält et al, 2021). Put differently, municipalities play important role in not only providing service and funding for the basic elderly but also are responsible for the working environment of employees including nurse assistants. Providing effective interventions to prevent work-related stress is crucial, however, Reydenfält et al. (2020) argue that there is not sufficient research to describe interventions and organizational changes related to a working environment in elderly home care, however, there is research about work-related stress, in general, exist which can be

fruitful to understand the underlying mechanism about work-related stress and interventions to prevent this phenomenon.

One of the highly influential models regarding work-related stress and health is related to the job demand-control support model (JDC-S) by Karasek and Theorell (1990). This model has been the theoretical foundation of more empirical studies in comparison with other models (Barlinge & Griffits, 2011). According to Karasek and Theorell (1990), psychosocial aspects of the work environment have consequences on the psychological and physical health of employees. These authors identified two aspects of work that relate to job demand or workload. The workload is the amount of work an individual should perform in a specific amount of time. The second aspects refer to job control which is sometimes called decision latitude which relates to employees' control over their job and scope for exercising their competence. The concept of "job strain" is highlighted by these scholars, which is a combination of the employee's low job control and high job demands. According to this model, job strain can be considered a strong risk for an employee's physical and mental well-being (Karasek &Teorell, 1990).

Johnson and Hall (1988) added the concept of social support in the workplace to this model. This means that employees can decrease their stress by gaining more job control and developing strong relationships between their colleagues and supervisor. However, according to (Egan et al., 2007; Van Der Doef & Maes, 1999; Häusser et al., 2010) the result of empirical tests of interactive effects is unclear. For example, the effect of control on exhaustion is not strong and the three-way interaction of JDC-S had weak effects on exhaustion. Despite this limitation, (Egan et al., 2007; Holman & Axtell, 2016) argue that the model became influential because there is evidence of the effect of job demand, job control, and social support on job satisfaction and employees' well-being. Another limitation of this model is that it does not consider the role of individuals, such as motivation, personality, or gender.

Another influential theory regarding work-related stress is referred to effort-reward imbalance model. This model emphasizes the human need for relationships with each other and the crucial role of social exchange between the individuals and their environment. Additionally, this model highlights the importance of positive feedback for self-esteem (Ren, et al., 2019). According to (Ren et al., 2019; Siegrist & Li, 2016) failed reciprocity between high employee efforts spent at work and low rewards they receive in turn elicits strong negative emotions and stress reactions with adverse long-term effects on health. According to (Siegrist & Li, 2016), ERI is based on three components: effort, reward, and overcommitment. The effort is related to extrinsic work demands. The reward can be associated with three different sources; Financial reward (salary or wage), stated-related reward (job security or career promotion), and socioemotional reward (esteem or recognition). Additionally, a distinct personal factor of coping with a demanding situation "overcommitment" does exist. According to (Siegrist & Li, 2016) individuals with overcommitment characteristics show excessive devotion to their work, however, overcommitment leads to stress responses and amplifies the adverse health effects of ERI. A systematic review by (Siegrist & Li, 2016) shows that overcommitment is associated with an employee's negative health outcomes such as psychological distress, anxiety, exhaustion, and sleep disturbance.

One of the most recent theories about work-related stress is the Psychosocial Safety Climate Work theory by an Australian researcher, Maureen F. Dollard, and her colleagues. According to this theory, senior management's attitude about employees' psychological health is a key factor to consider. The higher management and prevailing policies and practices of the society are related to employees' experience of stress at work (McCusker & Dollard, 2019). These authors argue that job demands, job resources, effort-reward imbalance, social

relations, and psychological health can be predicted by an employee's perception of how upper management values his/her employee's well-being and health. This theory highlights the role of management in an organization and argues that if the management takes stress prevention seriously, and if the management can communicate effectively with employees about psychosocial risks and mental health, stress will be reduced. Consequently, mental health should be the crucial agenda and should be followed up by organizational intervention with concrete strategies to cope with work-related stress (Dollard et al, 2019)

Organizational-level interventions in this area are designed to improve employees' psychological health and well-being by removing the cause of stress in organizations and achieving this goal involves changes in organizational practices and policies. The majority of interventions in this area relates to job redesign that aims to modify job characteristics like workload by changing work schedule (e.g.r educing daily workloads by eliminating 12-hour shift) (Holman et al., 2018; Schonfeld, 2017). However, research in this area is inconsistent. Scholars (Schonfeld, 2017; Cydulka et al.,1994) by using a pre-and post-test quasi-experimental design found that employees who work 12-hour shifts on fewer days in healthcare did not experience less stress in comparison to the control group who work 8-hour shift on more days. On the other hand, (Ruotsalainen et al., 2014) show that shorter work schedules reduced burnout symptoms in healthcare workers. One of the most influential models which are practical for organizations in case of job redesign is related to the job characteristics model by Hackman and Oldham (1976). As mentioned by these authors, five core job dimensions affect specific personal and work-related outcomes, including job satisfaction. These five dimensions are related to autonomy, feedback, skill variety, task identity, and task significance which impact three critical psychological states of employees. These states relate to experienced meaningfulness at work, experienced responsibility for the outcome of the work, and knowledge of the result of the work activities. This model can afford opportunities to promote employees' decision-making and autonomy and lead to employee growth and development (Hackman & Oldham, 1976).

Another organizational intervention is related to the diverse training or program to prevent work-related stress and promote health. These interventions include leadership training, improving communication in organizations, or introducing peer support groups that enable employees to discuss the difficulties they face (Holman et al., 2018). Among these interventions, leadership has a crucial role to promote employees' psychological well-being. Levy (2006) defines leadership as the social process through which a leader exerts influence over an employee's psychological processes and behavioral reactions. One of the most common theories about leadership is transformational leadership, which refers to a leader's ability to inspire employees and create value and positive changes in the organization. According to the developer of this theory, Bass and Avolio (1994), transformational leaders may use four strategies to influence followers, idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. Some recent studies showed that transformational leadership has been shown to have both main and moderating effects on employees' stress and well-being (Bono et al.,2007; Liu et al., 2010). Additionally, the result of some studies using multilevel data and longitudinal studies have also supported the view that trust in the leader-member relationship can be considered a key mechanism linking transformational leadership with greater well-being and lower stress in followers (Kelloway et al., 2012; Nielse &Munir, 2009).

Individual-level interventions seek to equip employees with the skill and abilities to prevent stress and promote well-being. In other words, these kinds of interventions provide employees with opportunities to engage in stress-reducing activities (Holman et al., 2018; Schonfeld, 2017). One of the most influential techniques in this area relates to developing employees' resilience concerning stressful situations. Resilience refers to the individual's

ability to recover or resist the impact of difficult situations. Robertson et al. (2015) conducted a qualitative review of resilience training and reported an overall positive effect on employees' general capability to respond to stress. In line with this study, Vanhove et al. (2016) conducted a meta-analysis including studies having quasi-experimental, experimental, uncontrolled and the result showed that the resilience training had a modest general positive effect on employee's well-being, however, the positive effects weaken over the time (Vanhore et al, 2016). Resilience intervention includes mindfulness training, cognitive behavioral therapy, relaxation, meditation, programs on self-regulation, problem-solving, training for recovery at work, resilience training, etc. It is worth knowing that some individual-level interventions are multimodal and sometimes a combination of relaxation, cognitive behavior therapy, or mindfulness exercise can be needed to have beneficial outcomes (Holman et al., 2018; Schonfeld, 2017).

According to Franklin et al. (2012) exposure to stressful events can be differently perceived by individuals depending on the vulnerability of each person and the level of his/her stress resilience. The underlying reason is related to neural processes and anatomical, functional, and molecular connectivity of the brain. However, according to some scholars, the role of personality-like traits such as cognitive and behavioral patterns is important to resist stress. For example, Bandura (1982) reflected upon self-efficacy and stated that individuals with high self-efficacy persist with the task in the face of difficulty and probably can achieve higher results with lower levels of stress. Finally, McEwen, Gray and Nasca (2015) studied resilience. These authors defined resilience as " achieving a positive outcome when individuals face adversity". This process involves bending and not breaking and can occur in the form of recovering from a bad experience or active resistance through coping mechanisms that operate at the time of difficulties.

Finally evaluating the effectiveness of stress interventions is important because it is crucial to consider the evidence for their effectiveness in reducing stress and promoting well-being (Holman et al. 2018). However, Cox et al. (2007) argue that despite the growing body of literature to evaluate organizational interventions, there are a few studies that have examined their effectiveness. Additionally, there is a lack of methodological rigor in many studies that exist. According to (Holman et al., 2018) traditionally, based on the natural science paradigm, randomized control trial (RCT) is recognized as an optimal methodology for evaluating interventions. RCT is a trial in which individuals are randomly assigned to one of two groups. It means that the experimental group receives the interventions and the control group receives an alternative treatment and change in the focal outcome is measured in both groups before and after the interventions. Put together, RCT provides stronger evidence for the causal effect of stress interventions (Holman et al., 2018). In contrast to this claim (Cox, et al., 2007; Nielse & Miraglia, 2017) have questioned whether RCT is an appropriate methodology for intervention evaluation. Consequently, using just the traditional scientific approach can not reflect the reality of organizational life.

According to (Cox et al., 2007) some underlying reasons are related to the feasibility of this method in organizational settings. Randomization is not practical or ethical and the equivalent control group is not always available. More pertinently, RCT focuses on change in outcomes and does not evaluate the implementing process of interventions or organizational contexts which can affect the interventions. Cox et al. (2007) suggested an alternative framework that covers both intervention outcomes and the implementation process. Some examples of implementation processes are related to employees' engagement with the interventions, the manager's advocacy of the interventions, and the availability of resources to support the implementation. Nielsen and Abildgaard (2013) being inspired by Cox et al. (2007) propose a longitudinal evaluation framework to get a deeper understanding of the

evaluating outcomes. Another key point in evaluating the effectiveness of interventions is related to using both qualitative and quantitative data.

**Aim and Research Questions**

The demand for more nurse assistants has increased drastically due to healthcare organizational changes and unprecedented growth of the older adult demographic, and nurse assistants and nurses vacate their job due to work-related stress as a result of emotional exhaustion and burnout (Brodaty et al, 2003; Aldaze et al, 2019). However, stress and work-related stress is a complex phenomenon that involves and is influenced by diverse factors on many levels. Consequently, multidimensional interventions are necessary to establish preventive interventions with broad impact. Nevertheless, not only are the organizational interventions complex and thorny but also the effectiveness of organizational-level interventions for preventing work-related stress is still questionable. Moreover, studies on the evaluation of these interventions are rare (Dewe & Cooper, 2017; Schonfeld, 2017). Additionally, as highlighted by Reydenfält et al. (2020) sufficient research to describe interventions related to a working environment in elderly home care is still rare. According to these authors, the scarcity of research in this occupation can be related to the difficulties of research in this area as a result of the size and the place of the municipalities, land ack of interest from management or politicians (Reydenfält et al, 2020).

The objective of this master thesis is to identify operational managers' (verksamhetschefer) perceived assumptions about the source of work-related stress in different municipalities. Answering this question is crucial because it affects establishing the potential intervention. Put differently, the perceived work-related stress can direct the choice of interventions (Dewe & Copper, 2017). Consequently, the author of this thesis aimed to get a deeper understanding of how operational managers perceive work-related stress in elderly home care. The choice of operational managers is based on their responsibilities concerning finance, personnel and working environment for the employees in the elderly care homes. Additionally, this study aims to explore what municipalities conduct to prevent work-related stress at both individual and organizational levels. Finally, the author of this thesis attempts to identify how municipalities evaluate their intervention's effectiveness. In the end, the potential changes in organizational intervention, improvement, and the areas that are needed to be taken into consideration will be proposed. Hopefully, the result of this study may bridge the gap between academia and practice. This thesis consists of three main questions.

- How do municipalities' operational managers perceive work-related stress regarding nurse assistants who work in elderly home care?

-What do municipalities' operational managers do to prevent work-related stress and promote well-being in the organization at both organizational and individual levels?

- How do municipalities evaluate the effectiveness of their interventions?

## Method

Since the aim is to deepen the understanding and explore operational managers' perception of work-related stress regarding nurse assistants who work in elderly home care in Sweden's municipalities, a qualitative approach is suitable. The underlying reason is related to the crucial role of perception in establishing organizational intervention to prevent stress and promote well-being (Schofeld, 2017). Already existing theories are used as a foundation of

the proposition as well as for the interviews. Therefore, a deductive approach is more appropriate. As stated by Wilson and MacLean (2011) deductive reasoning starts with a general statement about the world and then attempts to clarify particular observations. Thus, the research design in this study is top-down and it means that the author uses predetermined codes for the data. This study begins by studying diverse work-related theories and provide research questions based on them.

## Participants

Participants are operational managers of Care Administration in different municipalities in Sweden and they were recruited based on the information which is available on every municipality's official website. The general requirement of the participants was that the participants should be operational managers in municipalities who are more involved in the municipality's decision-making process than unit managers (enhetschefer). One of the essential requirements to get a position as operational manager in municipalities is that the applicant should have at least five years of working experience as a manager in public or governmental organizations. Thus, all the five operational managers meet this requirement. The sample size is often justified by interviewing participants until reaching "data saturation" (Francis et al., 2010; Guest et al., 2006). Data saturation is referred to as the point in data collection when no new additional data are found that could develop aspects of the conceptual category. Arguably, the data saturation concept is not without controversy among different scholars and more discussion will be presented in the discussion section. The sample size in this study is five operational managers in Sweden's different municipalities and their age rangess from 37 to 61. All respondents have for 11 to13 unit managers under their hierarchy.

An overview of the respondents is presented in Table 1.

### Table 1

*Overview of respondents*

| Municipality | Position | Interviwe Time | Gender | Type of interview | Experience |
|---|---|---|---|---|---|
| A | Operational Manager | 35 minutes | Femal | Online Team | 17 Years |
| B | Operational Manager | 45 minutes | Femal | Face to Face | 25 Years |
| C | Operational Manager | 45 minutes | Femal | Online Team | 6 Years |
| D | Operational Manager | 36 minutes | Femal | Online Team | 5 Years |
| E | Operational Manager | 25 minutes | Femal | Online Team | 11 Years |

## Procedure

Recruiting process is conducted by the official website of each municipality. Participants for the interviews were not recruited in the same manner because they were not available, and the author of this thesis tried to contact them both by sending emails and calling them to know how many operational managers have the possibility of participating. Finally, five operational managers could be recruited. Before the interviews were conducted, each participant was

given an information letter via email about the topic of this thesis and interviews (Appendix 2). The aim was to interview all the participants face to face, but four interviews were conducted online by the Team platform because of the sickness of operational managers and other issues. All the interviews were voice recorded. The length of the interview ranged from approximately 25 to 45 minutes. All the interviews were conducted in Swedish and transcribed in Swedish as well. However, the important quotes presented in the result section were translated into English. So, it is important to bear in mind that there is a risk that the empirical data can be interpreted differently by the author of this thesis when the information is translated.

**Data Collection**

Semi-structured techniques with open-ended questions were used in this thesis (Appendix 1). The underlying reason is that it enables the author to develop the answers as a result of exchanging information with the respondents. Additionally, the adaption of the interview format is possible even if there are predetermined themes. Langemar (2008) highlights some advantages of semi-structured interviews. One positive side of this method is that it enables the researcher to change the order of questions or add complementary questions depending on how the conversation is developed. This can be practical because the author of this thesis is not sure how the operational managers would answer the questions or their knowledge of the topic. Moreover, semi-structured interviews reinforce transparency as the questions can be adopted and clarified with additional details if they are not perceived correctly.

**Analytic Strategy**

To analyze and interpret the empirical data thematic analysis is used. Wilson and MacLean (2011) defined thematic analysis as an approach that identifies and analyzes patterns or themes across a data set. This identification, analysis, and reporting of themes can be considered the basic procedure of other qualitative methodologies as well and these authors claim that thematic analysis acts as a good foundation for qualitative research. Apart from that, there are other benefits of using thematic analysis in this research because of the complexity and multidimensional nature of work-related stress. These benefits relate to the flexibility of this approach. It means that unlike other qualitative techniques thematic analysis is not allied to a specific theoretical framework and it can be applied to a different framework and different research topics. Thematic analysis can be done in different ways, but the author of this thesis decided to use this technique based on preexisting theories which are described in the introduction. So, the author already had some idea of the themes aiming to investigate them.

According to Wilson and MacLean (2011) analyzing qualitative data using thematic analysis has several steps which are followed by the author of this thesis. First, the data were collected and transcribed. The second stage was related to familiarizing with the data by reading and rereading the data and making notes of any initial ideas or thoughts. The third step was to start coding all the data systematically, by noting the most important and interesting features of the data. The author of this thesis chose to write notes and highlights and use Post-it notes to identify important features. The fourth step was searching for the themes. To do this, all the codes were collected and sorted into different themes and sub-themes. After identifying themes and sun-themes, examples were found from the data to support them. The fifth step was related to reviewing and refining the themes. This step is quite time-consuming because the author needed to look back over the coded data relating to a specific theme and rethink if the data fit the theme and form a consistent pattern.  The last step

was related to defining and naming the themes. In doing so, the aim of the author of this thesis is not to report just the description of data, but to have an underlying argument that relates to the research questions (Wilson & MacLean, 2011).

**Ethical Consideration**

Ethical considerations in research are largely a matter of finding a reasonable balance between various interests that are all legitimate. To ensure that ethical principles for data collection were maintained, the author of this thesis sent an email to the participants before the interview. This email includes the purpose of the study, and information about the participant's rights according to Vetenskapårådet (2017) So, the important ethical principles which relate to informational-, consent-, confidential, and utilization requirement sets by Vetenskapsrådet (2017) was followed accordingly. All the operational managers express their consent to participate in the study verbally. Municipalities' and senior managers' information will be anonymous. Municipalities and decision-makers had been under criticism for long time regarding nurse assistants' working environment. All the interviews will be recorded by voice recorder and not with the researcher's mobile and all interviews will be deleted as soon as possible after finishing the study.

**Result**

The analysis resulted in two core categories, five categories, and nine subcategories. The core category - *Multiple dimensions of stress and stress interventions* - was based on four categories: *High workload, Lack of reward and appreciation* and *Budget* and *Complexity of individuals characteristics*. The other core category – *Lack of effective tools* - was based on one category: *Complexity of providing tools.* (Table 2). Each category includes converging sub-categories, illustrated by quotes from the interviews. In general, identifying the source of stress and organizational interventions and evaluating of effectiveness of interventions are perceived as challenging processes. The importance of having more economical support from the government to establish effective interventions and employee engagement in health issues were described as essential for promoting nurse assistant working environments. However, the lack of an economical budget was the important element that impeded establishing effective interventions to fight against nurse assistants' difficult working environment.

**Table 2**
*Illustration of the two core categories, five categories, and nine sub-categories*

| Core categories | Categories | Sub-categories |
|---|---|---|
| Multiple dimensions of stress and stress interventions | High workload | Lack of workforce<br>Lack of time/control |
| | Lack of Reward and appreciation | Imbalance work &reward<br>Low salary and status |
| | Budget | Prioritizing economy over healthy |
| | | The necessity of leadership training for unit managers |
| | The complexity of individuals characteristics | Employee's lifestyle |

| Lack of effective tools | Complexity of providing tools | Both qualitative and quantitative methods |
|---|---|---|

**High workload**

This category comprises two sub-categories - Lack of workforce and Lack of time and control. Operational managers reported that a high workload is inevitable in elderly home care due to multiple reasons, many nurse assistants complain of stress because of the high workload and lack of time to give the care the elderly need. Operational managers express that nurse assistants usually have to prioritize which task is important to do immediately and afterwards they do not usually have enough time and should continue to the next one. In this case, the nurse assistants leave the elderly experiencing stress of consciousness, feeling inadequate and powerless to stay and give the care needed to the elderly.

*Lack of workforces*

According to operational managers, one of the reasons for the high workload is related to the lack of enough nurse assistants and one of the contributing factors is the high level of nurse assistants on sick leave. This means that it is quite challenging to replace other employees immediately if someone is sick and this can result in more workload for the group. In this case, even the social support of colleagues can disappear. Consequently, a lack of sufficient personnel leads to more workload for nurse assistants and at the same time, they lose social support which can act as a buffer against the effect of high demand. As mentioned by to operational managers, lack of workforce was problematic during the Covid-19 pandemic due to sick leave. Even replacing or hiring a nurse assistant who works only part-time was also challenging. Obviously, the pandemic made the nurse assistant's working conditions worse.

> "*One of our crucial problems is the lack of competent nurse assistants, and even nurses in the municipality. Unfortunately, there are not so many professional nurse assistants or nurses applying for our job opening and this problematic*". (Operational manager, Municipality B)

> "*Actually, I think that we have limited staff. It is quite challenging to have sufficient staff, additionally, it is difficult to hire nurse assistants from other departments of the municipality*". (Operational manager, Municipality A)

On the other hand, one of the operational managers had another point of view regarding the lack of workforce. She mentioned that nurse assistants strive for a better working environment and better salary, thus, they apply for many different job openings, and if they find a better workplace, they do not want to stay anymore.

> "*Sometimes we have maybe 7-8 candidates after recruitment, however, at the end, we noticed that they have found a better workplace and they want to negotiate about their salaries. If the other municipality gives them more salary, they are not to work for us*". (Operational manager, Municipality D)

*Lack of time and control*

According to operational managers, nurse assistants experience an increasing sense of time strain in the form of higher psychological work-time demands and at the same time lower control over their time allocations. For example, they can not decide where and when they work and they conduct their task based on their schedule. As discussed by the respondents, nurse assistants cannot apply their autonomy in making decisions regarding the duration and timing of their work. However, they expressed that restructuring the schedule is a really time-consuming task for unit managers (enhetschefer) and coordinators (samordnare) and at the same time, it is the nurse assistants' responsibility to make a schedule that is healthy for everyone. One of the operational managers pointed out that despite all difficulties regarding restructuring schedules, providing more healthy schedules is easier when the groups have a better collegial relationship with each other.

> *"I can manage my schedule, I have control over my task but our nurse assistants do not have these possibilities. They have a strict schedule, they have to do their task at a specific time according to their schedule".*
>
> (Operational manager, Municipality C)

> *"Frankly speaking, we had a traditional method in this municipality, and managers used to control the performance of nurse assistants too much. For example, our nurse assistants had to register the time they have spent with the elderly and, they could be questioned if they did not have half-hour the unregistered time. Fortunately, we had a pilot study in our municipality that started last winter (5-6 months). Now we are going to change our methods and apply a trust-based method that can promote the nurse assistant's control and decision-making concerning their task. They can decide how they want to schedule their work and they do not need to register their time when they start their task. We get good results, and we are going to implement this strategy. However, it doesn't mean that this strategy generates no stress at all".*
>
> (Operational manager, Municipality E)

Operational managers in the municipalities confirmed the importance of time adequacy and decision- making as crucial factors for employees' well-being. They mentioned that they are trying to develop a better schedule with some flexible hours to improve nurse assistant working conditions. However, they mentioned that nurse assistant schedules were not optimal for long time ago, and municipalities aim to redesign their structure as much as possible.

## Lack of Reward and appreciation

Operational managers highlighted the role of sufficient reward and appreciation to motivate the employees and promote their well-being. They pointed out that, not only nurse assistants but also most employees who work in health care do not get enough reward and appreciation even though they do fundamental efforts for our society's welfare.

### *Imbalanced workload and reward*
All operational managers confirmed that the effort of nurse assistants is not balanced with the reward they get. They pointed out that the economic barrier is crucial to consider. They can not reward nurse assistants sufficiently. The respondents agreed about the pivotal role of the perception of nurse assistants of the "cost" and the "gain" in organizations and considered that as an important factor to promote their well-being. They argue that sufficient reward and appreciation generate positive emotion and make the employee motivated to stay and work in this occupation.

*"I have long experience working in governmental organizations. If I want to compare the reward system in municipalities with governmental organizations, I have to say that there are huge differences in how governmental organizations reward their employees in comparison with municipalities. I do not think that we have enough budget to reward our nurse assistants in a good way. I think that I had more opportunities in governmental organizations to reward employees.*

(Operational manager, Municipality B)

*"As I said before, we are restructuring many aspects of our municipality. It seems like our reward system was not sufficient actually, but I am very hopeful to implement a better reward system and I consider trust-based leadership as a reward for our nurse assistants.*

(Operational manager, Municipality E)

Obviously, one of the barriers to promoting a better reward system is related to economic problems. As mentioned by operational managers, establishing a more effective reward system needs a budget and restructuring the organizational practices.

### Low salary and status

Low salary and status were discussed during interviews with operational managers. They argued that low salary and status in this occupation are low and consequently nurse assistants do not feel good about that. Operational managers expressed that the financial budget is low in healthcare and municipalities from a practical perspective, and it is difficult to reward employees through higher salaries. Operational managers pointed out that low salary and status make this occupation unattractive, and many high school students do not choose to study health care and social service program in Sweden.

*"I think that the salary and status are low. We have to upgrade this occupation. I do not consider that as merely the municipality's responsibility. Government, social media and schools should focus on this occupation. High school students should be encouraged to study this program in high school, and everybody should know about the importance of this occupation".*

(Operational manager, Municipality B)

Operational managers reported that there is no fair balance between the "cost" and "gain" in the case of nurse assistants working conditions, but they could raise the salary in recent years. However, the respondents presented different ideas depending on their municipality. For example, one of the operational managers pointed out that nurse assistants' salaries depended on their working experiences in the municipality, and those who have more experience get more salaries.

*"We actually have some nurse assistants who get a salary nearly as much as a nurse. But of course, I do not mean every nurse assistant".*

*(Operational manager, Municipality D)*

**Budget**

In this category, the crucial role of budget is highlighted by the operational managers. According to these managers, common causes of stress and interventions to prevent this

phenomenon are related to the economy in different ways, and the budget should be approved by the politician and operational decision-makers in the municipalities.

### *Prioritizing the economy in relation to health*

Operational managers reported that top decision-makers in municipalities and politicians prioritize the economy almost most of the time due to economical restrictions. According to all operational managers in this study, heads of the municipalities have limited frameworks and they have to keep the budget under control. This can lead to negative consequences and sometimes they have to sacrifice employees' well-being and consider organizations' effectiveness and productivity because most of the time they do not have any other alternatives. The economic framework and employee well-being are interdependent and establishing effective interventions and preventing work-related stress are highly dependent on what top decision-makers prioritize. According to operational managers prioritizing the economy can influence the choice of the interventions as well and the alternatives will be limited.

> *"I have to say that top decision-makers and politicians are so interested in numbers, statistics, and budget. But they have no choice, I think that if they can not keep within a special budget, they cannot stay in their position".*

> (Operational manager, Municipality E)

> *"When I have meetings with the head of administration, it seems like he/she is more interested in the calculation, statistics, and our budget".*
> (Operational manager, Municipality C)

> *"I am not really sure if we can apply resilience training for nurse assistants in our municipality. At this time, we do not provide such training or workshop and we have to invest budget for that as well if we consider that as our future interventions, but, I am not sure actually".*
> (Operational manager, Municipality E)

### *The necessity of leadership training for unit managers*

Lack of leadership training for unit managers (enhetschefer) could be identified during interviews. According to operational managers, unit managers can participate in the UL and UGL leadership training programs which relate to a new leadership model by Swedish Armed Forces since 2003. Almost all new unit managers can participate in this program which takes approximately one week. As mentioned by operational managers UGL and UL are courses for new leaders to help them understand how groups work while the leader gains a deeper insight into how he/she is influenced and influenced by others. operational managers consider this course valuable for new leaders. However, they stated that municipalities do not usually provide any other training regarding how leaders can maximize their ability to communicate more effectively with their employees or how they can give and receive feedback.

> *"We do not provide leadership training in the way that you mentioned. We have UL and UGL for our new leaders but we do not have any workshop or training regarding feedback giving and receiving or any training to improve their communication skill".*

*"Actually, we had never had such training and we use UL and UGL for our new leaders"*.

Although Ul and UGL are considered effective leadership training by operational managers, municipalities lack continuous training or workshops to develop unit managers' skills and knowledge, and this aspect is crucial because the unit managers have the most contact with nurse assistants. In this part of the interview, most of the operational managers expressed their curiosity about different kinds of leadership training. They pointed out that they want to think reflexively about different alternatives for such programs but at the same time, they were doubtful if they have sufficient time and resources for that.

**The complexity of individuals' characteristics**

Operational managers highlighted the importance of individual characteristics during the interview. According to these operational managers, all the employees respond to perceived health threats differently and the underlying reasons may relate to some psychological factors within each person. They mentioned the concept of perceived control, self-efficacy, or resilience in their life. Some stressful situations may not be stressful for others and individuals' differences in experiencing positive and negative health outcomes should be taken into consideration.

*Nurse assistant lifestyle and family situation*

During the interview, almost every operational manager confirmed the high pressure and workload on nurse assistants, however, all of them highlighted the role of the nurse assistant's lifestyle and their work-life balance as well. According to respondents, there are diverse family demands which can affect the life of employees negatively. These respondents explained that stress cannot be merely related to working conditions. Operational managers argue that individuals have different beliefs about their health. Some employees pay so much attention to exercise, while some individuals do not.

*"Here I have to say that individual differences should be taken into consideration. We have some elderly care departments that do not have high statistics regarding nurse assistant sick leave. I have seen nurse assistants who do not exercise at all and do not have healthy eating habits and at the same time these employees expect to be able to work in elderly home care which is tough"*.

(Operational manager, Municipality A)

*"It is important to consider the private life of nurse assistants as well. We have some employees who have many challenges in their private life"*.

(Operational manager Municipality D)

Operational managers explained how individuals differ from one another regarding their health behaviour. They argue that healthy behaviours are embedded in a healthy lifestyle and relating all stress and ill-health to merely organizational structures will not give us a realistic picture of these situations. Operational managers named some non-health behaviour such as unhealthy eating habits, and lack of physical activity. Apart from that, they argue that some nurse assistants have so many family life complexities which affect their health as well and generates more stress in their life.

*Different motivational level*

Another crucial factor that was identified during interviews with operational managers was related to individuals' differences regarding their values, motivation, and their locus of control. All operational managers pointed out that organizations are not able to establish effective interventions at both individual and organizational levels without motivated employees. According to these operational managers, everyone is not motivated to change the situation or develop their skills and career at the same level.

> *"In our municipality, we succeeded to get enough budget for our nurse assistant's skill development and could provide some free education which can increase knowledge concerning dementia patients. However, only a few nurse assistants have applied for this program. Of course, we are not able to send all nurse assistants to these programs but we could provide for at least half of them. So, as you see we want to help our nurse assistants and make opportunities for their skill development but they do not want".*
>
> (Operational manager, Municipality C)

> *"Frankly speaking, we have a good budget for the skill development of our employees but the point is that we do not have clear policies. During these years we have invested in personal development and succeeded in taking the money from the government but I have to say that individuals are different".*
>
> (Operational manager, Municipality A)

Operational managers argue that established effective intervention to develop nurse assistants' skills and knowledge cannot be conducted by ignoring individual differences. All of the operational managers expressed that employees come from different backgrounds with diverse motivations, interests and values. Every employee does not have the same opinion regarding skill and knowledge development.

**The complexity of providing tools**

The complexity of providing tools could be identified as an important category during interviews. Operational managers expressed that they do not have sufficient knowledge and tools to evaluate the effectiveness of their interventions and at the same time they mentioned that providing such tools is not without challenges. These respondents argue that it is often difficult to get employees to answer lengthy questionnaires and, in this case, many employees avoid answering the questions. However, three operational managers expressed that they are supposed to get consultancy from one external actor to promote health in their municipality and this external actor is supposed to give consultancy regarding effective ways to evaluate the interventions.

> *"It depends on what you mean by evaluations. If you mean the annual evaluations about the municipality's overall performance, we have different kind of surveys related to organizational issues such as, leadership performance, working environment or organizational policies and practices which all the employees supposed to answer them. But, if you mean special way to evaluate the effectiveness of out interventions, I have to say that we do not have such tools".* (Operational manager, Municipality A)

*"We do not have such tools and personally, I think that it is quite difficult to provide such tools that everyone could answer. According to my experience, employees are not willing to answer lengthy survey. But we are going to get help from a consultancy firm to provide better working conditions for our nurse assistants and I hope that they can provide us some recommendations about evaluation of effectiveness of our interventions".*

(Operational manager, Municipality D)

Obviously, there is a need for effective methods to evaluate whether a specific intervention works or not and indicate some clarification on why some interventions work or not work. As discussed by operational managers there is a lack of effective tools to evaluate the effectiveness of interventions and at the same time, it is difficult to find tools with high response rates. The respondents of this study expressed that the lack of effective tools and the complexity of providing them is an important issue and they hope to get help from external actors.

### *Qualitative and quantitative methods*

During the interviews, operational managers discussed other complexity regarding evaluations of interventions. They argue that using surveys may not lead to a real understanding of the effectiveness of the interventions. Interpreting the perception of employees getting by questions with 5 to 6 alternative answers is problematic. One of the operational managers expressed that evaluation of effectiveness of interventions is not possible if they do not provide opportunities for nurse assistants to express their opinion about these interventions and according to her using surveys is not sufficient to get deeper understanding of employees' perception about the evaluations.

*"I think that we need questionnaires or surveys with open-ended questions and leave some places for employees to express their opinion openly but anonymously, Personally, I think that there should be some alternatives to understand more about the effectiveness of interventions".*

(Operational manager, Municipality B)

*"Unfortunately, we do not have such a method, but I can see a need for that. I think that it would be great if we can provide tools to help us understand the nurse assistants' idea deeply.*

(Operational manager, Municipality C)

As reported by operational managers aiming at improving employee health is challenging to evaluate. These respondents argued that quantitative approach often related to questionnaire data do not lead to deeper understanding about what and why employees think that some interventions work or do not work. They mentioned to some alternatives as a surveys with open-ended questions. So, a supplement to quantitative data is needed. However, according to operational managers, they need to get more help to provide such tools.

### Discussion

This thesis aimed to identify operational managers' perceived assumptions regarding the source of work-related stress concerning nurse assistants who work in elderly home care in municipalities in Sweden. Getting a deeper understanding of operational managers' perceived assumptions is crucial because it influences establishing the potential

interventions. Additionally, the objective of this thesis was to investigate what municipalities conduct to prevent work-related stress at both individual and organizational levels and finally how they evaluate their intervention's effectiveness. The result of a qualitative study with semi-structured questions suggested that these five operational managers identify the source of work-related stress with a diverse interrelated perspective. According to the respondents, one of the major reasons relates to workload and lack of control regarding tasks and challenges in redesigning organizational structure due to economical frameworks and the policies of top decision-makers and politicians. Moreover, the result suggested that an employees' lifestyle and motivation are crucial to consider. Regarding organizational and individual interventions, the result showed that municipalities do not have specific and continuous leadership training regarding communication or feedback for unit managers (enhetschefer) who have daily contact with nurse assistants. Additionally, municipalities do not have workshops or training to increase resilience in individuals. Finally, according to these operational managers, there is a lack of a scientific method to evaluate the intervention's effectiveness. However, the result showed that municipalities become more aware of work-related stress and try to get more budget and establish effective interventions to prevent stress in elderly home care.

Regarding the high workload, low control, and support, the result from the qualitative analysis suggested that nurse assistants who are working in elderly home care suffer from the high workload and lack of control to conduct their tasks which can result in work-related stress. According to the respondents, a high workload due to lack of time and sufficient workforce and lack of control generates stress with negative health consequences. This notion is supported by previous research (Karasek & Theorell, 1990; Barlinge & Griffiths, 2011; Häusser et al., 2010). This is further confirmed by the result of this study as reported in the category *high workload.* According to these authors, job strain which relates to low control and high job demands is considered a strong risk for an employee's mental and physical well-being. Additionally, operational managers highlighted the role of the covid-19 pandemic as an exacerbating factor in the nurse assistants' working environment. Regarding social support, managers agree with the buffering role of social support from other colleagues, however, they pointed out that having sufficient staff is quite challenging especially during the pandemic due to sick leave. Operational managers highlighted even the challenging aspect of redesigning the organizational structures due to economical frameworks. They argued that decreasing the workload of nurse assistants and increasing their control over their job requires getting more budget from the government.

The result of this study regarding the balance between what nurse assistants get and what they gain was controversial. These operational managers agree that the financial reward of nurse assistants is not sufficient, and municipalities try to compromise the budget with politicians, and they have a constant struggle to get more budget to not only rewarding the employee financially but also investing in employees' educational development as well. This result is in line with the previous literature that suggests that failed reciprocity between the high effort of employees in workplaces and the low reward they receive in turn leads to stress reactions with adverse long-term effects on employee's health (Siegrist & Li, 2016; Ren et al., 2019; Siegrist, 2017; Rugulies et al., 2017). Clearly, according to operational managers and previous literature, lack of social reciprocity and mismatch between "costs" and "gains" elicit negative emotions of reward frustration and this relates to psychological stress responses. However, operational managers identified another aspect of reward and educational development of nurse assistants. As mentioned in the result section, municipalities struggle to compromise the budget and provide educational opportunities to promote the skill and knowledge of employees, but all employees' motivation and willingness to promote their careers are not at the same level. As discussed by one of the respondents of this study, the

municipality could provide free education for employees and they do not get much positive feedback from nurse assistants to participate in free education.

In further regard, operational managers perceived assumption of work-related stress and interventions were highlighted in the third category of this thesis which relates to the budget. As mentioned by the respondents, there is a clear tension between municipalities' need for continuous productivity and service concerning the mental health of employees. The respondents expressed that budget and economic statistics play crucial roles in decision-makers' and politicians' investments, and most of the time they have to prioritize the economy concerning employee's health. Consequently, all interventions or policies to prevent work-related stress will be affected in different ways. The importance of operational managers' attitudes about employees' psychological health as a key factor related to employee health outcomes is highlighted by (McCuster & Dollard, 2019; Cox & Cheyne, 2000). According to these authors, management's commitment to stress prevention, organizational communication about psychological health, and management priority for employee's psychological health are related to employee's health outcomes. Dollard et al. (2019) elaborate more on the mechanism whereby top decision makers' policies relate to employees' psychological health through influencing job design. Clearly, the role of top decision-makers is to organize, plan and control the effort of employees using available resources to achieve the goal of the organization. Obviously, the organizational resources are finite and any management decision requires the weighing up of competing interests, for example, the need for more profit and productivity versus concern for worker health.

During the interviews, all operational managers pointed out that they do not have any regular leadership training for unit managers to promote their ability to communicate and give feedback to their employees effectively. Moreover, the municipalities did not invest in individual or group training to promote employee resilience such as mindfulness or cognitive behavior therapy. Different kinds of leadership training for unit managers or offering mindfulness or any other workshop to promote individual resilience, cannot be conducted without a sufficient budget. The importance of leadership training for unit managers and resilience training for employees are highlighted by previous literature. Robertson et al. (2015); Vanhore et al. (2016) by conducting a qualitative review of resilience training reported an overall positive effect of these kinds of training on employee's general capability to respond to stress. Additionally, a recent study by (Bono et al., 2007; Liu, Siu, Shi., 2010) showed that transformational leadership which focused on leaders' ability to communicate and motivate employees, has been shown to have both main and moderating effects on employees' stress and well-being. However, operational managers, pointed out that they are trying to compromise the budget and get more money to implement better interventions. These managers were hoping to get more resources in the future and do much more than they do now.

The result of the fourth category, the complexity of individual characteristics, was important to consider. All operational managers mentioned that in identifying a nurse assistant's working environment, it is important to pay attention to an individual's characteristics like their lifestyle and their health attitudes. These respondents expressed that municipalities' interventions cannot be effective if the nurse assistants do not have healthy lifestyle or if they have other private challenges in their life. However, this result is quite controversial. From one side, the literature indicates that individuals with low socio-economic status are supposed to have lower healthy behavior. The main socio-economic factors which influence healthy behavior are related to educational attainment and income. More specifically, according to previous literature, education, can be regarded as a major determinant of healthy behavior because it can influence both employment status and income (O'Neill et al., 2014; Stormacq et al., 2019). On the other hand (Van der Heide et al., 2013;

Kaphingst et al., 2012) argue that education measured by the number of school years is not related to someone's healthy behavior and they argue that to fully capture the relationship between individuals' differences and their healthy behavior, it is necessary to measure an individual's actual cognitive skills and specific knowledge about how they understand, appraise and apply healthy information. Considering all these discussions, the result of this study suggests that individual differences are highly important to consider in implementing interventions and municipalities can invest more in healthy workshops or programs for employees.

Finally, regarding the result of the last category, complexity of providing tools, operational managers pointed out that they do not have any specific effective tools to evaluate the effectiveness of their interventions. According to the respondents they have annual questionnaires that they sent to all employees in the municipality in which employees get opportunities to evaluate the different parts of organizational aspects such as, working environment or leadership performance, however, all of the operational managers expressed that these questionnaires are not related to the evaluation of interventions and they merely consider the performance of the municipality as a whole. Two operational managers indicated that they are going to get help from some consultancy actors to apply special tools. All operational managers expressed that it is challenging to provide effective tools as well because using only the quantitative questionnaire data will not be sufficient to get deeper understanding of what employees think about special interventions. This result is in line with the previous literature that indicates that there is a small number of research that have examined the effectiveness of organizational interventions. Moreover, according to these authors, there is a lack of methodological rigor in many studies that exist (Cox et al., 2007; Holman et al., 2018). According to these authors, there is a need for a more broadly scientific framework for evaluating interventions for example applying both qualitative and quantitative data or using multiple methods and measurements from a variety of disciplines.

The author of this thesis used an exploratory research design to answer the research questions. Some aspects of the exploratory study have been discussed by Saunders et al. (2016). Exploratory study can provide a good opportunity for the researcher to understand the complex phenomenon by asking open questions and analyze issues from different perspectives. However, (Given, 2008) argue that exploratory design produces qualitative data which may be difficult to interpret, and they can be subjected to biases (Given, 2008). In order to decrease the risk of wrong interpretation Langemar (2008) suggests that the researcher can summarize the answer of respondent and check he/she understood the respondents answer correctly which is done during the interviews in this research as well.

Using a qualitative approach can be appropriate concerning research questions. The benefit of these methods is related to producing detailed descriptions of participants' feelings, experiences, and interpretations of their actions (Langemar, 2008; Smith et al., 2011). So, this method is appropriate to investigate how operational managers perceive work-related stress that is a crucial foundation for establishing organizational interventions to prevent stress in workplaces and generate a healthy environment. However, qualitative research cannot generalize to a bigger population because of its small sample size, and this is one of the main limitations of qualitative studies that their findings cannot be extended to a wider population with the same degree of certainty that qualitative analysis can (Wilson & MacLean., 2011; Rahman, 2016). Arguably, Guest et al. (2006) claim that if one considers the unit of attention as a phenomenon under investigation, rather than only the number of individuals, maybe the sample is larger than first appears. Another important aspect to consider is related to using semi-structured questions in this study. The interviews were guided by the author's schedule rather than be dictated by it and consequently, the interviews could follow the respondent's interests or concerns. However, using semi-structured interviews encourage two-way

communication and provides an opportunity so that the researcher can learn the answer to the questions and the reason behind the answers and at the same time allow respondents time to open up about the sensitive issues. The result of this study may differ by using structured interviews. As mentioned by (Bryman., 2008; Smith et al., 2011) the structured interview shares much of the rationale of the psychological experiment and they are more controlled and reliable in the sense that the same format is being used with each respondent and the identity of the interviewer should have minimal impact on the responses obtained.

*Limitation*

One of the potential limitations of this study relates to the limited sample size (N=5) due to the limited timeframe. There is a possibility that the outcome could be different in case of a larger sample size. Gender distribution in sampling was based on only women since the frequency of female operational managers (verksamhetschefer) is considerably higher in this region. This could be seen as a potential limitation. However, since this is a qualitative study generalization per se is not warranted. All interviews were conducted in Swedish language and translated to English later on which means that there is a risk of lacking the full subtlety of meaning or significance when translated from one language to another. Assessing qualitative data is different from quantitative. According to (Smith et al., 2011: Wilson & MacLean., 2011) reflexivity is one of the most important criteria of qualitative studies. Obviously, qualitative research tends not to make any claims about objectivity in a way that most quantitative research does. These authors define reflexivity as the practice of reflecting upon the research process and identify the role of researcher in different parts of the process from choice of the topic to the conduct of the investigation itself. In other words, the researcher should examine her/his background beliefs and values and see how they might have influenced the research questions or interpretation of the finding. The author of this thesis has a background in organizational psychology and leadership and Management. Consequently, several interpretations are considered before analyzing the findings. Diverse backgrounds can influence the data analysis and enrich the reflexivity. Another potential factors which can affect the result of this study is related to the size and region of different municipalities. Arnetz and Arnetz (2000) argue that the size and the complexity of the organization, the competence of different employees and managers, climate work and efficiency or organization's goal clarity can influence the organizational outcomes. Municipalities vary in terms of population, wealth and policies and it can also influence their decisions regarding stress issues (Arnetz & Arnetz, 2000). This study is conducted in a medium size municipality and five rural municipalities.

*Suggestion for further study*

Inspired by the result of this study, the author of this thesis argues that establishing effective intervention in municipalities is dependent on the top decision makers and politicians who have more power on deciding upon economical budget. One of the important research areas in the field of work-related stress is to investigate the impact of management and politicians' ideologies on employee stress. As mentioned in the introduction, the environmental contexts such as political power relations and their decision about the budget are postulated to influence psychosocial safety climate which influences risk factors at work. Consequently, research about the association between top decision makers and politician's philosophy and work-related stress is recommended. Apart from this, it will be interesting to research if new technologies can be practical tools in order to monitor the employee's stress level continuously aiming to prevent work-related stress. One example of this tool is

presented by Arapovic-Johansson et al. (2017) who attempts to assess work-related stress by text message single item stress questions. Additionally, as mentioned in the introduction and result section, research investigating organizational interventions' effectiveness aims to capture the effectiveness of evaluation in a broader perspective using both qualitative and quantitative methods. Finally, more longitudinal studies are required to assess the long-term impact of organizational interventions to prevent work-related stress. This is important because they can provide unique insight that allows the researchers to follow the changes over time.

# References

AFA försäkring.(2020). *Allvarliga arbetsskador och långvarig sjukfrånvaro inom vården.* Retrieved 2022-04-10 from https://www.afaforsakring.se/globalassets/forebyggande/analys-och-statistik/rapporter/2020/f6345_delrapport_vardyrken.pdf

Aldaz, E., Aritzeta, A., & Galdona, N. (2019). The association between alexithymia, emotional intelligence and burnout among nursing assistants working in nursing home settings: A cross-sectional study. *Journal of Advanced Nursing*, 75(11), 2786–2796. http://dx.doi.org/10.1111/jan.14153

Arapovic-Johansson, B., Wåhlin, C., Kwak, L., Björklund, C., & Jensen, I. (2017). Work-related stress assessed by a text message single-item stress question. *Occupational medicine (Oxford, England), 67*(8), 601–608. https://doi.org/10.1093/occmed/kqx111

Arbetsmiljöverket. (2018). Arbetsrelaterade besvär [Work-related disorders] 2018. Retrieved 2022-04-01 from https://www.av.se/globalassets/filer/statistik/arbetsorsakade-besvar-2018/arbetsorsakade_besvar_2018_rapport.pdf

Arbetsmiljöverket. (2016). Arbetsorsakade besvär (Work-related disorders) 2016. Retrieved 2022-04-12 from https://www.av.se/globalassets/filer/statistik/arbetsorsakade-besvar-2016/arbetsmiljostatistik-arbetsorsakade-besvar-2016-rapport-2016-3.pdf

Arnetz, J. E., & Arnetz, B. B. (2000). Implementation and evaluation of a practical intervention programme for dealing with violence towards health care workers. *Journal of Advanced Nursing, 31*(3), 668–680.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist, 37*(2), 122–147. https://doi.org/10.1037/0003-066X.37.2.122

Barling, J., & Griffiths, A. (2011). A history of occupational health psychology. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of occupational health psychology* (21–34). American Psychological Association.

Bass, B.M. & Avolio, B.J. (red.) (1994). *Improving organizational effectiveness through transformational leadership.* SAGE.

Bono, J. E., Foldes, H. J., Vinson, G., & Muros, J. P. (2007). Workplace emotions: The role of supervision and leadership. *Journal of Applied Psychology, 92*(5), 1357–1367. https://doi.org/10.1037/0021-9010.92.5.1357

Brodaty, H., Draper, B., & Low, L. F. (2003). Nursing home staff attitudes towards residents with dementia: strain and satisfaction with work. *Journal of advanced nursing, 44*(6), 583–590. https://doi.org/10.1046/j.0309-2402.2003.02848.x

Bryman, A. (2018). *Samhällsvetenskapliga metoder.* 3rd ed. Liber.

Cooper, C., Field, J., Goswani, U., Jenkins, R., & Sahakian, B. (2009). *Mental capital and wellbeing.* Wiley & Sons.

Cox, S. J., & Cheyne, A. J. T. (2000). Assessing safety culture in offshore environments. *Safety Science, 34*(1–3), 111–129. https://doi.org/10.1016/S0925-7535(00)00009-6

Cox, T., Karanika, M., Griffiths, A., & Houdmont, J. (2007). Evaluating organizational-level work stress interventions: Beyond traditional methods. *Work & Stress, 21*(4), 348–362. https://doi.org/10.1080/02678370701760757

Cydulka, R. K., Emerman, C. L., Shade, B., & Kubincanek, J. (1994). Stress levels in EMS personnel: A longitudinal study with work-schedule modification. *Academic Emergency Medicine : Official Journal of the Society for Academic Emergency Medicine*, *1*(3), 240–246.

Dewe, P. & Cooper, C.L. (2017). *Work stress and coping: forces of change and challenges.* SAGE.

Dollard, M. F., Dormann, C., & Awang, I. M. (Eds.). (2019). *Psychosocial safety climate : A new work stress theory*. Springer International.

Egan, M., Bambra, C., Thomas, S., Petticrew, M., Whitehead, M., & Thomson, H. (2007). The psychosocial and health effects of workplace reorganization. 1. A systematic review of organizational-level interventions that aim to increase employee control. *Journal of Epidemiology and Community Health, 61*(11), 945–954. https://doi.org/10.1136/jech.2006.054965

Franklin, T. B., Saab, B. J., & Mansuy, I. M. (2012). Neural mechanisms of stress resilience and vulnerability. *Neuron, 75*(5), 747–761. https://doi.org/10.1016/j.neuron.2012.08.016

Francis, J. J., Johnston, M., Robertson, C., Glidewell, L., Entwistle, V., Eccles, M. P., & Grimshaw, J. M. (2010). What is an adequate sample size? operationalizing data saturation for theory-based interview studies. *Psychology & Health, 25*(10), 1229–1245. https://doi.org/10.1080/08870440903194015.

Given, L. (2008). *The SAGE Encyclopedia of Qualitative Research Methods*. SAGE.

Guest, G, Bunce, A and Johnson, L. 2006. How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, *18*(1), 59–82.

Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior & Human Performance, 16*(2), 250–279. http://doi.org/10.1016/0030-5073(76)90016-7

Hassard, J., Teoh, K. R. H., Visockaite, G., Dewe, P., & Cox, T. (2018). The cost of work-related stress to society: A systematic review. *Journal of Occupational Health Psychology, 23*(1), 1–17. https://doi.org/10.1037/ocp0000069

Holman, D., & Axtell, C. (2016). Can job redesign interventions influence a broad range of employee outcomes by changing multiple job characteristics? A quasi-experimental study. *Journal of Occupational Health Psychology, 21*(3), 284–295. https://doi.org/10.1037/a0039962

Holman, D., Johnson, S., & O'Connor, E. (2018). Stress management interventions: Improving subjective psychological well-being in the workplace. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being* DEF Publishers.

Häusser, J. A., Mojzisch, A., Niesel, M., & Schulz-Hardt, S. (2010). Ten years on: A review of recent research on the job demand-control (-support) model and psychological well-being. *Work & Stress, 24*(1), 1–35. https://doi.org/10.1080/02678371003683747

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*(10), 1336–1342. https://doi.org/10.2105/ajph.78.10.1336

Kaphingst, K. A., Goodman, M., Pyke, O., Stafford, J., & Lachance, C. (2012). Relationship between self-reported racial composition of high school and health literacy among community health center patients. *Health Education & Behavior, 39*(1), 35–44. https://doi.org/10.1177/1090198111406538

Karasek, R., & Theorell, T. (1990). *Healthy work. stress, productivity and the reconstruction of working life*. Basic Books.

Kelloway, E. K., Turner, N., Barling, J., & Loughlin, C. (2012). Transformational leadership and employee psychological well-being: The mediating role of employee trust in leadership. *Work & Stress, 26*(1), 39–55. https://doi.org/10.1080/02678373.2012.660774

Langemar, P. (2008). *Kvalitativ forskningsmetod i psykologi: att låta en värld öppna sig*. (1. uppl.) Liber.

Levy, P.E. (2006). *Industrial/organizational psychology*: understanding the workplace. (2. ed.) Boston: Houghton Mifflin.

Liu, J., Siu, O.-L., & Shi, K. (2010). Transformational leadership and employee well-being: The mediating role of trust in the leader and self-efficacy. *Applied Psychology:* An International Review, *59*(3), 454–479. https://doi.org/10.1111/j.1464-0597.2009.00407.x.

McCusker, L., & Dollard, M. (2019). The Climate According to Whom? Does It Matter Who Reports PSC? In: Dollard, M., Dormann, C., Awang Idris, M. (eds) *Psychosocial Safety Climate*. Springer, Cham (341–362). https://doi.org/10.1007/978-3-030-20319-1_14

McEwen, B. S., Gray, J. D., & Nasca, C. (2015). Recognizing resilience: Learning from the effects of stress on the brain. *Neurobiology of Stress*, *1*, 1–11. https://doi.org/10.1016/j.ynstr.2014.09.001

Nielsen, K., & Abildgaard, J. S. (2013). Organizational interventions: A research-based framework for the evaluation of both process and effects. *Work & Stress, 27*(3), 278–297. https://doi.org/10.1080/02678373.2013.812358

Nielsen, K., & Miraglia, M. (2017). What works for whom in which circumstances? on the need to move beyond the 'what works?' question in organizational intervention research. *Human Relations, 70*(1), 40–62. https://doi.org/10.1177/0018726716670226

Nielsen, K., & Munir, F. (2009). How do transformational leaders influence followers' affective well-being? Exploring the mediating role of self-efficacy. *Work & Stress, 23*(4), 313–329. https://doi.org/10.1080/02678370903385106

O'Neill, J., Tabish, H., Welch, V., Petticrew, M., Pottie, K., Clarke, M., ... & Tugwell, P. (2014). Applying an equity lens to interventions: using PROGRESS ensures consideration of socially stratifying factors to illuminate inequities in health. *Journal of clinical epidemiology, 67*(1), 56–64.

Rahman, M. S. (2016). The Advantages and Disadvantages of Using Qualitative and Quantitative Approaches and Methods in Language "Testing and Assessment" Research: A Literature Review. *Journal of Education and Learning*, *6*, 102–112. https://doi.org/10.5539/jel.v6n1p102

Ren, C., Li, X., Yao, X., Pi, Z., & Qi, S. (2019). Psychometric properties of the effort-reward imbalance questionnaire for teachers (teacher ERIQ*). Frontiers in Psychology, 10*, 12. https://doi.org/10.3389/fpsyg.2019.02047

Robertson, I.T., Cooper, C.L., Sarkar, M. and Curran, T. (2015) Resilience Training in the Workplace from 2003-2014: A Systematic Review. *Journal of Occupational and Organizational Psychology, 88*, 533–562. https://doi.org/10.1111/joop.12120

Rugulies, R., Aust, B., & Madsen, I. E. H. (2017). Effort–reward imbalance at work and risk of depressive disorders. A systematic review and meta-analysis of prospective cohort studies. *Scandinavian Journal of Work, Environment & Health, 43*(4), 294–306. https://doi.org/10.5271/sjweh.3632

Ruotsalainen, J. H., Verbeek, J. H., Mariné, A., & Serra, C. (2014). Preventing occupational stress in healthcare workers. *The Cochrane database of systematic reviews*, (12), CD002892. https://doi.org/10.1002/14651858.CD002892.pub4

Rydenfält, C., Holgersson, C., Östlund, B., Arvidsson, I., Johansson, G., & Persson, R. (2020). Picking low hanging fruit—A scoping review of work environment related interventions in the home care sector. *Home Health Care Services Quarterly, 39*(4), 223–237. https://doi.org/10.1080/01621424.2020.1772936

Rydenfält, C., Persson, R., Arvidsson, I., Holgersson, C., Johansson, G., Östlund, B., & Persson, J. (2021). Exploring Local Initiatives to Improve the Work Environment: A Qualitative Survey in Swedish Home Care Practice. *Home Health Care Management & Practice*, *33*(3), 154–161. https://doi.org/10.1177/1084822320986933

Saunders, M., Lewis, P. och Thornhill, A. (2016). *Research methods for business students.* 7th ed. Pearson Education.

Schonfeld, I.S. (2017). *Occupational Health Psychology* [Elektronisk resurs]. Springer.

Siegrist, J. (2017). "Applying occupational health theories to educational stress and health: evidence from the effort-reward imbalance model," in McIntyre, T., McIntyre, S., Francis, D. (eds) *Educator Stress. Aligning Perspectives on Health, Safety and Well-Being* (223–235). Cham: Springer. https://doi.org/10.1007/978-3-319-53053-6_10.

Siegrist, J., & Li, J. (2016). Associations of Extrinsic and Intrinsic Components of Work Stress with Health: A Systematic Review of Evidence on the Effort-Reward Imbalance Model. *International journal of environmental research and public health*, *13*(4), 432. https://doi.org/10.3390/ijerph13040432

Smith, J.A., Breakwell, G.M. & Wright, D.B. (red.) (2011). *Research methods in psychology.* (4. ed). SAGE.

Stormacq, C., Van den Broucke, S., & Wosinski, J. (2019). Does health literacy mediate the relationship between socioeconomic status and health disparities? integrative review. *Health Promotion International*, *34*(5), e1–e17. https://doi.org/10.1093/heapro/day062

Szebehely M, Stranz A, Strandell R (2017) Vem ska arbeta i framtidens äldreomsorg? Working Paper/Department of Social Work, Stockholm University 2017:1

Van der Doef, M., & Maes, S. (1999). The job demand-control (-support) model and psychological well-being: A review of 20 years of empirical research. *Work & Stress, 13*(2), 87–114. https://doi.org/10.1080/026783799296084

Van der Heide, I., Wang, J., Droomers, M., Spreeuwenberg, P., Rademakers, J., & Uiters, E. (2013). The relationship between health, education, and health literacy: Results from the dutch adult literacy and life skills survey. Journal of Health Communication, *18*, 172–184. https://doi.org/10.1080/10810730.2013.825668

Vanhove, A. J., Herian, M. N., Perez, A. L. U., Harms, P. D., & Lester, P. B. (2016). Can resilience be developed at work? A meta-analytic review of resilience-building programme effectiveness. *Journal of Occupational and Organizational Psychology, 89*(2), 278–307. https://doi.org/10.1111/joop.12123

Vetenskapsrådet (2017). *God forskningssed [Elektronisk resurs].* (Reviderad utgåva). Vetenskapsrådet.

Wilson, S. & MacLean, R. (2011). *Research methods and data analysis for psychology*. McGraw-Hill Higher Education.

**Appendix 1**
**Informationsbrev**

Hej!
Jag heter Soma och läser mastersprogram i organisationspsykologi i Linneuniversitetet. Jag har valt att skriva en magisteruppsats 15 hp vid Umeå universitetet om hur kommuner kan förebygga arbetsrelaterad stress för undersköterskor som jobbar inom omsorgsförvaltningen. För att samla in den informationen behöver jag intervjua verksamhetschefer. Intervjuerna tar cirka 30- 45 minuter. Intervjuerna kommer att spelas in med hjälp av ljudspelare och därefter transkriberas och analyseras.

Största möjliga konfidentialitet eftersträvas i undersökningen. Alla deltagare och kommuner kommer att anonymiseras och ingen obehörig får ta del av det inspelade materialet. Ljudfilerna kommer att raderas efter transkriberingen.

Ditt deltagande i studien är helt frivilligt och du kan när som helst avbryta ditt deltagande utan att uppge skäl. Genom att delta i studien vet jag om och samtycker till:

Att det är helt frivilligt att delta i studien
Att jag kan avbryta min medverkan när som helst utan förklaring och att delta inte kommer inte medföra repressalier eller vidare frågeställningar
Att risker och fördelar med att delta i studien är små
Att mina uppgifter behandlas konfidentiellt och enbart av behöriga
Att resultatet från intervjuerna kommer att publiceras i en studieuppsats, där resultatet redovisas avidentifierat.

Min kontaktuppgift    Soma Ahmadi    sa223hn@student.lnu.se    072 853 44 59

 Min handledare        Patrik Hansson    patrik.hansson@umu.se

**Appendix 2**

**Interview Guideline**

**Explanation of the project** (Organizational interventions to prevent work-related stress for nurse assistants who work in elderly home care in municipalities)

**Get recording approved, assure anonymity and do not mention any sensitive information about persons.**

**Clarify time requirement** (30-45 minutes)

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**The source of perceived work-related stress**

1. What do you think about a nurse assistant's working environment in general?

2. Would you please name some sources of work-related stress about the nurse assistant's working condition?

3. Could you name some crucial factors which lead to burnout?

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**Job-Demand-Control-Support Model (JDC-S)**

4. How do you evaluate job demand for nurse assistants who work in elderly home care?

5. To what extent a nurse assistant can control their task? To what extent can they make a decision and prioritize their task?

6. Can you explain the role of colleagues and managers to prevent work-related stress?

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**Effort-Reward Imbalance Model (ERI)**

7. Could you please explain the reward system regarding nurse assistants?

8. How do you evaluate the nurse assistant's salary in comparison to their job demand?

9. What kind of career development or promotion can your municipality offer for nurse assistants?

10. Can you explain the municipality's strategies to promote the nurse assistants' esteem?

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**Psychological Safety Climate Work stress (PSC)**

11. How do you evaluate the role of management to prevent work-related stress and promote well-being?

12. Have you ever experienced the dilemma between prioritizing organizational productivity with employee's well-being?

13. How often do managers prioritize talking about work-related stress in their weekly meeting with nurse assistants?

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**Organizational-level interventions**

14. How often do you invest in special training/program to promote feedback in your municipality?

15. What is your policy regarding special leadership training which promotes first unit managers (enhetschefer) ability to support and motivate their employees? How often do you have such training?

16. Can you explain how managers can communicate more effectively with their employees?

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**Individuals-level interventions**

17. What kind of help can municipalities offer to individuals to prevent work-related stress?

18. Do you have any training or workshops to generate recovery at work? Can you elaborate more if the answer is yes?

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**Evaluation of interventions**

19. How do you evaluate the performance of your managers?

20. What is your strategy in order to evaluate your intervention? Qualitative / Quantitative?