Span of Control’s Significance for Public Sector Employees’ Working Conditions and Well-Being

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The reforms in the public sector, as consequence of New Public Management, have led to flattened organizational structure, increasing the span of control (SOC) width for managers. The aim of the study was to investigate the association between SOC width, working conditions (job demands, job resources and engaged leadership), employee health and engagement. SOC was measured as predictor for employee health and engagement, where mediation of working conditions effect on the relation was examined. Self-administrated surveys were collected from 1551 employees working under 109 managers in four public sector municipal operations in Sweden. The result displayed that it was unfavorable to have managers with a wide SOC for the employees working conditions, engagement and health. SOC was a significant predictor for health, while mediation of working conditions could not account for the relationship. These results indicate that a narrow SOC may improve working conditions and health outcomes for employees.
A key factor in facilitating a healthy workplace for employees is to have an understanding of which organizational settings that forms the psychosocial work environment. SOC is one factor that reflects the structure of the organization, but which may also matter at an individual level. For employees where their manager has a wide SOC, i.e. many subordinates, the negative effects found has been an increased employee turnover as well as an increase in willingness to quit their job (Burke, 1996; McCutcheon, 2004) a reduction in staff engagement and overall work satisfaction (Burke, 1996; Cathcart et al., 2004; Green, Anderson & Shivers, 1996). This in turn is a slippery slope, considering that low employee engagement has been found to be associated with higher health risk factors as well as a decrease in overall life satisfaction (Burton, Chen & Schultz, 2017; Polo-Vargas, Fernández-Ríos, Bargsted, Ferguson, & Rojas-Santiago, 2017). Furthermore, the results of a wide SOC has also been found to be associated with an increase in the work demands per employee as well as a broader width regarding work tasks (Bothe & Meier, 2001; Meier & Bothe, 2000). This is worrying for public sector organizations, considering that previous research has shown that high work demands combined with restricted resources are linked to increased sick leave rates and stress-related health issues (Demerouti, Bakker, Nachreiner & Schaufeli, 2001; Sverke, Falkenberg, Kecklund, Magnusson Hanson & Lindfors, 2016; SWEA, 2014).

Recent research regarding SOC has emphasized how it affects the management’s working conditions and possibility to influence (Lucas, Laschinger & Wong, 2008; Wallin, et al., 2014). Meanwhile, few studies have examined each supervisors’ SOC width and its association with the employees working conditions and their work engagement as well as health. Considering that SOC may be connected to employees working conditions, while poor job conditions distresses the psychosocial work environment, it is of importance to acquire more knowledge regarding structural mechanisms that impacts organizing and working conditions in order to prevent stress-related health issues. It would consequently appear relevant to investigate whether there are systematic differences in structural settings for supervisors in the public sector and if it impacts the employees working conditions and in turn their overall well-being and workplace engagement.

In an attempt to understand the impact of organizational structure on working conditions for employees, the aim of this paper is to investigate the association between SOC, working conditions (job demands, resources and leadership) and how this in turn impacts public sectors employees’ health and engagement.

The public sector and New public management

The downsizing process in public sector have been based on New Public Management theories (NPM), which originally was managerial ideas within private companies (Hood, 1991). As a theory it was postulated as a way for the public sector to improve by adopting the administrative procedures used in the private sector, where slim organizations had been associated with improved performance (Bach & Della Rocca, 2000; Hood, 1991). At a practical level, NPM emphasizes cost-efficient performance through decentralization in the form of a flattened organizational structure, with higher customer-focused orientation as expected outcome (Pollitt & Dan, 2013).

NPM theories has been applied in several countries and it has been a major factor for the organizational changes in the public sector of Sweden (Borins, 1998; Montin, 2004).
However, the transformation of the public sector has received a lot of critique, for instance that the nature of public organizations cannot be compared to private sector organizations. It has been argued that NPM’s focus on financial ratio have led to neglect of several important aspects of work, such as the importance of dialogue and other social characteristics of work (Noordegraaf & Abma; 2003; Szücs et al., 2003). This is worrying considering that a large part of public sector is to provide social welfare such as healthcare and education, where social characteristics of work is vital in order to provide good services (Thylefors, 2007). In addition, the effects that NPM strived to achieve, for instance cost-efficient and customer-focused organizations, has not been found in studies that have investigated the long-term results of the reform (Chandler, Barry & Clark, 2002, Farrell & Morris, 2003). In the context of the Swedish public sector, the NPM reforms have to certain extent been associated with negative outcomes, such as tougher working conditions for managers, less resources and an increase in SOC width (Montin, 2000; Szücs et al., 2003; Wallin, et al., 2014).

**Span of control**

The concept of SOC began in the early 20th century in the UK from the assumption that managers have restricted time and energy to devote to their employees. The idea was known at that point as establishing a management ratio, meaning a limit to the number of subordinates per supervisor. The main focus of research regarding the area has been trying to pinpoint an optimal SOC width that managers can handle. Initial research specified that the optimal width was considered three to six employees (Bell, 1967; Urwick, 1956). However, the impact of SOC varies based on certain factors, such as type of organization and if the employees are involved in organizational goals (Meier and Bohte, 2000; Mintzberg, 1993). Another factor that might affect the impact of SOC is whether workers perform daily-based routine tasks or if the tasks are of great diversity and complexity (Ouchi & Dowling, 1974). It has been argued that when working tasks are complex and diverse, a narrow SOC is fitting, whereas routine-based work allows for a broader SOC width (Visser, 2000). This might indicate that the research focus regarding SOC should not necessarily be about pinpoint an optimal width, but rather how different widths affect working conditions. In the meantime, the research has been sparse when looking at how different SOC widths affects the employees working environment and perceptions (Lucas et al., 2008; Mintzberg, 1993; Schyns, Maslyn & Weibler, 2010).

Research in the 21th century has taken steps towards investigating the effect that SOC width have on managers as well as on employees (Furnham, 2008, Visser, 2000). By investigating SOCs impact, it might provide necessary information for building robust and maintainable organizational structures that potentially could counteract inequalities affecting work and health outcomes (Lucas et al., 2008; Wallin et al, 2014).

Concerning SOC and the potential impact on inequalities, Björk and Härenstam (2016) found that managers in female oriented operations had worse prerequisites regarding the organizational structure in comparison to male oriented organizations. One of the mentioned workplace level mechanisms where female managers had a disadvantage was SOC; female managers having a wider SOC in comparison to male supervisors. The authors argue that knowledge about organizational structure such as SOC and the impact it may have is of crucial information in order to prevent inequalities and health issues (Björk & Härenstam, 2016).
For managers, research has indicated that it affects their ability to empower their employees as well as support them in their work (Harder et al., 2000; Hjalmarsson, Norman, & Trydegård 2004; Lucas et al., 2008) and that it decreases the overall effect that the leadership may have (Doran et al., 2004). Furthermore, another finding shows that SOC does not only affect leadership possibilities, but also the employees view of the leadership (Doran et al., 2004). For example, SOC has been found to be a significant moderator between the relationships of employee’s perception of their supervisor behavior and their supervisor’s emotional intelligence as well as the perception of the manager’s ability to improve the working environment (Lucas et al., 2008). Leadership in an organization could consequently be perceived as dysfunctional where the employees blames the manager, whereas organizational structure is hampering the supervisor’s ability to reach out to the employees. Possible evidence of this is that a wide SOC has been shown to increase the organizational workers turnover intention (Burke, 1996; Burton, Chen & Schultz, 2017; Polo-Vargas et al., 2017)

In summary, when employees are clustered together in a large group with only one manager, their resources may be insufficient, depending on how high the demands are (Meier & Bohte, 2000). It is therefore possible that SOC may have a connection to employees working resource and working demands. Dollard and Baker (2010) stated that there is a gap in literature regarding organizational aspects that may impact employees working conditions and well-being. Consequently, it is imperative to examine how SOC width affect public sector working conditions and in turn their health, thereby addressing the gap in literature between the effect of SOC, employees working conditions and well-being.

Balance models concerning occupational stress and working conditions

One theory that explicitly focuses on how job demands and lack of resources may affect employees working condition is the job demands-resources (JD-R) model. The model was established in order to combine existing theories and literature into one regarding workplace settings relationship to burnout, chronic states of work related psychological disorders and job engagement (Demerouti, bakker, Nachreiner & Schaufeli, 2001).

The JD-R model has its foundation in two predominant work stress models concerning psychosocial job settings; the job demand-control (JDC) model and the effort-reward imbalance (ERI) model. Karasek (1979) introduced the JDC model as a theory attempting to unite the current research regarding occupational stress and sociological theories on alienation. Social support was later on added to the model as another key aspect, also known as the job demand-control-support (JDCS) model (Karasek, & Theorell, 1990). However, the model struggled to explain perceived workplace inequalities caused by the rise of individual employment contracts and wages during the 1990’s.

The ERI model raises the concept that a person expects reasonable salary, appreciation and other resources based on their performance (Siegrist, 1996). However, both these models have received criticism over the years, for instance that that they fail to reflect modern working demands and resources. It has been argued that there is discrepancy between the models and their operationalizations to use for constructing questionnaire instruments (De Jonge & Kompier, 1997; Oxenstierna, Widmark, Finnholm, & Elofsson, 2008). In order to overcome mentioned limitations that the previous work-balance models
had, a new model was postulated by Demerouti and colleagues, now known as the JD-R model (Demerouti et al., 2001).

The job demands-resources model

The JD-R model states that every job involves work demands and resources. The work environment may differ between each employee, but their working conditions can still be categorized into either demands or resources (Demerouti et al., 2001). Job demands are described as areas of work that requires continuous physical, social or organizational effort, which are therefore associated with physical as well as mental costs. These demands can be classified as aspect of work that drains cognitive or emotional energy (Bakker and Demerouti, 2007; Demerouti et al., 2001). Examples of job demand that has been discovered in research using the JD-R model as framework are physical workload, time pressure, role ambiguity and inadequate environmental conditions (Bakker & Demerouti, 2007; Bakker et al., 2003; De Jonge et al., 1999; Demerouti et al., 2001; Söderfeldt et al., 1996).

Job resources are in contrast positive aspects of work that are supposed to refuel the exerted energy lost due to work demands. Resources are typically associated with organizational as well as social aspects of the job that alleviates demands and provides support in achieving work balance and stimulation. Resources can in this term be broad since it reflects aspects of the job that are subjectively perceived as important coping measures for the individual. For example, work resources could be career development opportunities, support from colleagues or job autonomy (Bakker and Demerouti, 2007; Bakker et al., 2003).

Excessive work demands, in combination with a lack of resources at hand, may cause a stressful work balance which in the long-term can lead to undesirable consequences, such as poor work performance, decrease in work satisfaction and eventually affect the persons physical or mental health (Demerouti et al., 2001). Copious of job resources upweights demands and can lead to an increase in workplace satisfaction and performance (Bakker, Van Veldhoven & Xanthopoulou, 2010). Ensuring that an individual has sufficient resources has been linked towards improved job performances as well as health benefits (Demerouti et al., 2001; Näswall, Hellgren & Sverke, 2008; Van den Broeck, Van Ruysseveldt, Van Belle & De Witte, 2013).

The difference in comparison with the previous balance models is that the JD-R model allows for flexibility regarding both the work environment and different working conditions (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004). Bakker and Demerouti (2007) accentuates that measurement instruments can be adapted and tailored for a specific sample, based on which demands and resources are of importance at a certain workplace. Furthermore, studies have found that the model is robust when used in different countries, with a wide range of methods as well as measurements (Llorens, Bakker, Schaufeli & Salanova, 2006).

In recent years, there have been talks of adding different layers to the existing model. The authors of the model, Bakker and Demerouti (2018) wrote about how the model could be improved going forward, where leadership could be one important aspect to include in order to explain the full picture of work related conditions. Other than encouraging the
addition of leadership functions, the model also allows room for how the employees perception of the management may influence the workplace (Bakker and Demerouti, 2018). Since few studies have found signs of a relationship between the size of SOC and perceived work resources, where leadership in recent time has started to function as a work resource, it appears of significance to include the relationship between the width of SOC and the employees view of their supervisor (Bakker and Demerouti, 2018; Meier & Bohte, 2000; Dollard & Bakker, 2010, Bohte & Meier, 2001).

The job demands-resources leadership model
Previous research has emphasized the possibility of leadership influencing work demands and resource. For instance, poor management style has been associated with an increase for employees’ role ambiguity which in turn causes distress (Skogstad, Einarsen, Torsheim, Aasland & Hetland, 2007). Therefore, it could be argued that leadership plays a bigger role in the JD-R model that goes beyond merely being looked at through perceived feedback. Bakker and Demerouti (2018) suggests calling the new dimension of job resource in the model for engaged leadership.

Engaged leadership is rooted in the psychological theory of self-determination and focuses on how leadership affects employee engagement on an individual level, but also for a cohesive working unit. The word engaging is used to describe actions from the management intended to inspire, strengthen and connect their employees towards a similar goal as well as each other (Schaufeli, 2015). Engaged leadership can in this way help give the employees a sense of that they can contribute and that they feel at ease with their work tasks as well as their colleagues. Consequently, leadership style may be a resource for employees (Bakker & Demerouti, 2018; Schaufeli, 2015).

Research has found associations between the effect of leadership and improved working conditions for the employees. For instance, Perko, Kinnunen and Feldt (2017) found that employees that reported higher in terms of job demands also reflected on the supervisors as more unfair as well as higher in abusiveness. Furthermore, an employee-focused leadership style has been found to reduce the risk of burnout as well as increase work engagement (Schaufeli, 2015). Leadership style was shown to contribute to a decrease in amount of work demands for the employees as well as improve the amount of resources available, which in turn may decrease the risk of burnout and increase engagement for the employees (Schaufeli, 2015; Shuck & Herd, 2012). However, SOC complicates the relationship between leadership, job demands and resources.

Wide SOC width has been associated with a decrease in the amount of resources that supervisors can distribute towards the employees, meaning that SOC may mitigate the impact of leadership style (Schyns, Maslyn & Veldhoven, 2012; Simpson, Dearmon & Graves, 2017). It could therefore be argued that a wide SOC may inhibit a leader’s potential to improve or establish a well-structured workplace where the employees thrive. This leads to the question of how the relationship functions between SOC, working conditions (demands, resources and engaged leadership) and employee well-being.

Psychosocial well-being and employee engagement
The combination of high work demands and low amount of resources effect on psychosocial well-being is well-validated (Sverke et al., 2016; Demerouti et al., 2001;
Van den Broeck et al., 2013; SWEA, 2014). The connection between a wide SOC and increased work demands as well as resources is furthermore something that previous studies have indicated (Bothe & Meier, 2001; Thylefors, 2007; Wallin et al., 2014). There are correspondingly several results regarding SOC, job demands and its effect on employee engagement (Burke, 1996; Cathcart et al., 2004; Green et al., 1996; Schaufeli, 2015; Shuck & Herd, 2012). However, one problematic aspect regarding results for employee engagement has been its similarity or indefinite relationship to latent variables such as job satisfaction and organizational commitment.

The first formal introduction of employee engagement was by Kahn (1990) as part of his management model. He described employee engagement as the organization connecting the staff with their respective work roles. An engaged employee could be someone who is passionate about their work and who handles the organization’s agenda as their own, symbolizing that it’s both satisfaction with their work role but also with the organization as whole (Kahn, 1990). In a meta-analysis by Harter, Schmidt and Hayes (2002) a comparison was performed between employee satisfaction and engagement in relation to work outcomes, where the result indicated that they measured similar concepts. The modern approach, which will be used in the present study, is to consider the construct as a practical adaption of job satisfaction, rather than commitment, with the inclusion that the individual has to regard their work as meaningful as well (Schaufeli & Bakker, 2010; Shuck, Reio & Rocco, 2011).

In terms of psychosocial well-being, engagement has been coined as the antithesis of burnout, based on results indicating that engaged employees are unlikely to suffer from stress related health issues (Maslach, Schaufeli & Leiter 2001). Additionally, a recent study by Van Den Broeck et al. (2017) found that the effect that job demand and resources had on work engagement as well as burnout were consistent across different sectors. A vocal point of the authors was that more research is needed associated with work engagement, especially in the public sector.

In terms of SOC and psychosocial well-being, the results have been diverse in previous research. Theobald and Nicholson-Crotty (2005) examined the potential effects of a wide SOC for employee well-being, where the result was multifaceted. Similarity of daily tasks was one factor of impact, where a wide SOC had higher influence on employee well-being if tasks were seen as of complex nature and if the work required a high amount of face to face meetings (Theobald & Nicholson-Crotty, 2005). Furthermore, a study by Holm-Petersen, Østergaard and Andersen (2017) showed that by altering the organizational structure to a narrow SOC width, i.e. below 15 employees per supervisor, it was associated with a decrease in sick leave rates and health related issues. For the Swedish public sector, it has been argued that more knowledge is required about workplace interventions that aims at improving psychosocial working conditions. One recommendation was that narrowing the SOC width may improve working conditions, both for employees and supervisors (Vinberg, Romild & Landstad, 2015).

**Present study**
Based on the mentioned research, the aim of this paper is to investigate the association between SOC width and public-sector employees’ working conditions (job demands, job resources and engaged leadership) as well as psychosocial well-being (employee
engagement and health). Furthermore, if SOC can predict employee engagement or health outcomes, where possible mediation of working conditions on these associations will be examined. The job demands-resource model, with the inclusion of engaged leadership, will be used as a theoretical framework when trying to understand what demands and resources that each individual has at hand, based on their managers SOC width.

The investigation was based on the following research questions:

i. Is SOC width associated with public sector employees’ working conditions (job demands, job resources and engaged leadership), employee engagement and health?

ii. Can SOC predict employee engagement and health?

iii. Do working conditions (job demands, job resources and leadership) mediate the association between SOC and employee health and engagement?

Method

Participants
The data of the present study is derived from a cross-sectional questionnaire collected in autumn 2016. All respondents in the study worked at the same municipal operation in the greater Stockholm area. The study included four types of operations with a total of 2201 employees, working under 109 supervisors. The largest operation had 847 respondents working under 48 supervisors, while the operation with the lowest number of respondents had 142 employees and 12 managers. The least number of employees per supervisor was one employee and the highest 66 (M = 27.63, SD = 13.64). Of the 2201 employees, 1586 answered the questionnaire and 35 were removed on the basis that they had failed to respond to at least 30% of the included question in the questionnaire. In total, 1551 employees were included in the study. Of the remaining respondents, 17.3% had worked 0-2 years within the municipality, while the largest group, consisting of 597 employees (38.5%), had 2-10 years tenure within the municipality. All the questions used in the study had missing answers, ranging from four missing answers to a maximum of 444 for one question.

Materials
The questionnaire used had been constructed by an external organization that works with employee surveys and contained 80 questions. The organization provided 72 questions and answers, whereas the rest was considered too sensitive or not necessary for the present study. The questionnaire was based on theoretical foundation from Bassi and McMurrer (2006) and had constructs intended to measure work satisfaction, working conditions, information distribution, leadership, possibilities of career development, work resources and health. All the survey questions were formulated in Swedish.

For the present study, the variables of interest were SOC width, job demands, job resources, engaged leadership, employee engagement and health. Face validity was used as a first step in order to evaluate which questions that could be used, with foundation in the theoretical literature. After the use of face validity, 51 questions remained from the 72 questions that were provided. The 21 items removed were not deemed necessary for the current study, based on the theoretical framework and constructs. Of these remaining
questions, ten were perceived as measurement for job demands, 16 for work resources, 16 for leadership questions, one for health and six for employee engagement. As secondary step, exploratory factor analyses (EFA) and Cronbach Alpha was used to control for which questions that could be removed. All questions were measured using a five-point Likert-scale (1 = do not agree at all, 5 = agree completely). The remaining two were period of employment and which type of operation they belonged to. The external organization provided the number of employees per supervisor and who their respective supervisor was (all managers were coded under different numbers) using register data. Items for each latent variable were analyzed using mean scores.

**Background variables.**
In total, three variables were provided and used to measure background information regarding the participants. Tenure was measured using four groups (between 0-2 years, 2-10 years, 11-20 years and more than 20 years employment time within the organization). The second question was regarding which type of operation the employees worked at (the social operation, development operation, commune regime operation and the education operation). The finale background variable was number of employees per supervisor, which were measured using a continuous variable, used for measuring SOC width.

**Job demands.**
Ten questions were estimated to measure job demands, based on the theoretical framework of the JD-R Model. These questions had the aim of reflecting how the respondents perceived their working demands such as workload, if they had clear working tasks, role ambiguity etc. From the 10 questions distributed using face validity, seven remained after using Cronbach reliability analysis as well as EFA’s. The standardized Cronbach’s alpha for the lasting seven items was .85.

**Job resources and collegial support.**
Originally, 16 questions were, based on the JD-R models definition of resources, projected to measure the amount of job resources that the respondents perceived that they had at their disposal. Included items were perceived as reflecting of social support, amount of control, how the physical work environment was etc. However, the EFA divided these items into two factors, where nine were regarding job resources. Four items were related to collegial support. The last three items were removed because they failed to fulfill EFA criterions. The standardized Cronbach alpha for the job resources construct was .88, while alpha for the collegial support items was .81.

**Engaged leadership.**
leadership was an already existing construct in the questionnaire by the exterior organization, with 16 items in total. The nature of the questions was regarding the employees’ perception of their supervisor. All questions were deemed as reflective of engaged leadership using face validity, with the JD-R leadership model as theoretical framework. One of these items were removed based of high cross-loadings with another factor. Of the 15 remaining items, the standardized Cronbach alpha was .96.
Employee engagement and health.

Six questions were estimated to measure employee engagement. The questions were evaluated as employee engagement using the modern approach of the construct, i.e. reflecting job satisfaction and meaningfulness. One of these items were removed because of high cross-loading, low factor loading, and that Cronbach alpha would increase if it were to be removed. The standardized alpha for this construct was .87.

A single-item measure was used for health. The item measurement was "I feel that my health is overall pretty good".

Procedure
An employee at the human resources department of the municipality contacted Stockholm University in interest of investigating the effect of SOC, where it was left open to decide on which variables were relevant to investigate in regard to SOC. A meeting was arranged between the author and the employee where it was established that an existing set of data from a questionnaire from autumn 2016 were available at hand to use. The questionnaire and the data relating to it was obtained through an external organization that had performed the survey for the municipality in 2016. In order to obtain the data, a confidentiality agreement was drawn and signed by the author, the external organization and the contact person from the municipality. The confidentiality agreement included that the data was only to be used for research purpose. The external organization confirmed that ethical concerns had been taking into consideration, for instance that the respondents had been informed of the purpose for the questionnaire, where participation was voluntarily and they could quit at any point.

Statistical analysis
The data was analyzed using SPSS version 24. Little’s Missing Completely At Random (MCAR) test was used to see if the data was missing completely at random, based on all selected questions. The test was significant (p < 0.01) meaning that the null hypothesis was rejected and therefore not MCAR. In order to investigate if the data was missing at random (MAR) or missing not at random (MNAR) a missing value analysis was performed, which indicated that the data did not have a specific pattern in terms of MNAR. The next step performed was a t-test comparison of means between respondents without missing data on important variables and respondents with missing data. The mean difference between the two groups for all variables were small (less than .30 per variable) which can be an indicator of MCAR or at the least MAR (Carpenter & Kenward, 2013). Since the data could be argued for being missing at random, multiple imputation was used to avoid having to use listwise deletion and risk losing respondents answers on certain variables which had over 300 missing values. Five different iterations were established for the missing data using multiple imputation. The analysis of the data was based on pooled results of the combined iterations.

EFA’s within construct and between constructs were used as statistical method to investigate the variables constructed using face validity. Principal axis factoring was used since the goal was theoretical exploring of newly assembled measuring constructs. Oblique oblimin rotation method was used with basis around the expected hypothesis regarding correlation findings. Eigenvalue of 1 or higher was used as cut-off. For selecting items, the criteria’s that were examined were each items communality level,
where it should ideally be above .4 and the primary factor loadings, where an acceptable level is .4 (DeVellis, 2012; Shultz & Whitney, 2013). These guidelines were also used for EFA between constructs with the added emphasis on cross-loadings between the different constructs. The criteria for cross-loading were a gap of at least .2 between the constructs for each item. After performing within construct EFA for each construct a reliability analyses were used to check the internal consistency of the items for each factor using Cronbach’s alpha. The criteria were based on recommended rules of thumb, where above .7 is acceptable and .9 is considered excellent (Shultz & Whitney, 2013).

Based on the outcome of the EFA’s, nine questions were removed and job resources were structured as two dimensions, job resources (several different areas concerning resources) and collegial support. The finale result of the EFA, including the remaining 40 items, is displayed in Table A1 in the Appendix.

Results

Correlations between all measured variables were calculated using two-tailed Pearson correlation coefficient. Descriptive statistics, correlations and reliability analysis of all variables in the study are displayed in Table 1.

Positive significant correlations were found between job demands, job resources, support, leadership and engagement. There was also a significant correlation between low amount of work demands and employee health. Similar type of significant positive relations was found between resources, collegial support, leadership, engagement and health. Regarding SOC, weak significant associations were found with job resources, collegial support, leadership, employee engagement and health.

Table 1. Pooled correlations, mean values, standard deviations and Cronbach reliability estimates for the variables included in the study.

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>M</th>
<th>SD</th>
<th>Alpha</th>
</tr>
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<tbody>
<tr>
<td>Job demands</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.11</td>
<td>.66</td>
<td>.85</td>
</tr>
<tr>
<td>Job resources</td>
<td>.72**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.65</td>
<td>.76</td>
<td>.88</td>
</tr>
<tr>
<td>Collegial support</td>
<td>.59**</td>
<td>.59**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.17</td>
<td>.71</td>
<td>.81</td>
</tr>
<tr>
<td>Leadership</td>
<td>.61**</td>
<td>.74**</td>
<td>.53**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td>4.01</td>
<td>.92</td>
<td>.96</td>
</tr>
<tr>
<td>Employee engagement</td>
<td>.69**</td>
<td>.68**</td>
<td>.58**</td>
<td>.56**</td>
<td>1.00</td>
<td></td>
<td></td>
<td>4.22</td>
<td>.69</td>
<td>.87</td>
</tr>
<tr>
<td>Health</td>
<td>.39**</td>
<td>.44**</td>
<td>.34**</td>
<td>.32**</td>
<td>.44**</td>
<td>1.00</td>
<td></td>
<td>4.01</td>
<td>1.01</td>
<td>-</td>
</tr>
<tr>
<td>Span of control</td>
<td>-.02</td>
<td>-.14**</td>
<td>-.14**</td>
<td>-.12**</td>
<td>-.06**</td>
<td>-.13**</td>
<td>1.00</td>
<td>27.63</td>
<td>13.64</td>
<td>-</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01; 2-tailed.
N = 1551.

The result showed that an individual who perceived the demands as low also experienced more amount of job resources, high degree of collegial support, engaged leadership and were overall satisfied with their job. Furthermore, employees who had supervisors with a narrow SOC perceived resources, support, leadership engagement and their overall health...
as better, indicating that a narrow SOC was associated with better working conditions and psychosocial well-being.

One-way analysis of variance (ANOVA) was used to control for differences in SOC width for the background variables type of operations and tenure. Levene’s test was significant for type of operations. Consequently, as recommended by Field (2018) when homogeneity of variance has been violated, the Brown-Forsythe test was used instead. The Games-Howell post-hoc test was used to compare the sample categories within type of operation, which is a valid approach when the homogeneity of variance has been violated (Field, 2018). The result of the ANOVA is displayed in table 2.

The result showed that type of operation was significantly associated with SOC width $F(3, 1547) = 121.79$, ($p < .001$), but not years of tenure $F(3, 1547) = 1.60$ ($p > 0.05$). Post-hoc analysis using Games-Howell method indicated that the mean score for all operations were significantly different to one and another in relation to SOC width, with exception for that the education operation did not significantly differ from the development operation. Taken together, these results suggest that the different type of operations differs in organizational structure regarding SOC width within the municipality.

Table 2. Means (standard deviations), minimum SOC width, maximum SOC width and one-way analysis of variance (ANOVA) between sample categories for years of tenure and type of operations’ SOC width.

<table>
<thead>
<tr>
<th>Sample categories</th>
<th>SOC</th>
<th>Min. SOC width</th>
<th>Max. SOC width</th>
<th>df</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Years of tenure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-2 years (n = 268)</td>
<td>26.81(14.03)</td>
<td>2</td>
<td>66</td>
<td>3</td>
<td>1.60</td>
</tr>
<tr>
<td>2-10 years (n = 597)</td>
<td>26.89(13.51)</td>
<td>1</td>
<td>66</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>11-20 years (n = 412)</td>
<td>28.76(13.52)</td>
<td>2</td>
<td>66</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>20+ years (n = 274)</td>
<td>28.37(13.80)</td>
<td>1</td>
<td>66</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Type of operation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>121.79***</td>
</tr>
<tr>
<td>Education operation (n = 829)</td>
<td>29.44(9.26)</td>
<td>1</td>
<td>44</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Social operation (n = 385)</td>
<td>32.24(15.24)</td>
<td>8</td>
<td>55</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Commune regime operation (n = 197)</td>
<td>12.80(7.21)</td>
<td>1</td>
<td>26</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Development operation (n = 140)</td>
<td>25.14(21.30)</td>
<td>4</td>
<td>66</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

***$p < .001$.  
N = 1551.

**Multiple mediation models**

A mediation analysis was performed to see if working conditions (job demands, job resources and leadership) mediated any possible association between SOC and employee health as well as employee engagement. Preacher and Hayes (2008) macro was used as mediation analysis method. The macro functions as a regression analysis which allows
for testing multiple mediation between variables. An upper and lower confidence interval was created after redistributing the sample 5000 times. An indirect effect, i.e. mediation, is feasible if the confidence interval for a mediating variable does not include the value zero within the bounds of the intervals (Preacher & Hayes, 2008).

The first analysis had health as dependent variable, where the total effect of SOC was \( c = -0.13 \) (\( p < .001 \)) and the direct effect \( c' = -0.08 \) (\( p < .001 \)). The result displayed that SOC width was a weak predictor for employee health, meaning that wide SOC width was associated with a decrease in reported employee health.

Indirect effects for the mediating variables included were 95% CI [-0.01, 0.01] for job demands, 95% CI [-0.05, -0.03] for job resources, 95% CI [-0.02, -0.01] for collegial support and 95% CI [0.01, 0.02] for leadership. In order to conclude that a variable has had a mediating effect on the independent variable, the confidence interval (CI) may not have any zero values in it. Since all confidence intervals had zero values in them, neither of the mediators’ indirect effects were significantly different from zero (\( p > .05 \)), meaning that no mediation of working conditions was found. The total amount of variance explained by the mediation model was 22% (\( p < .001 \)). The result of the first mediation analysis is displayed in Figure 1.

![Diagram](image)

**Figure 1.** Pooled standardized coefficients showcasing the mediating effect of working conditions (job demands, job resources, collegial support and leadership) on the relationship between SOC and health. A represents the association between SOC and health on its own while B represents the relationship between the two variables when the selected mediators are included into the analysis. 

\( N = 1551, *p < .05, **p < .01, ***p < .001 \).
The obtained result for the second mediation analysis with employee engagement as dependent variable had a negative significant result for the total effect \( c = -0.06 \) (\( p < .001 \)), while the direct effect was positive \( c' = .02 \) (\( p < .01 \)), possibly demonstrating a suppressor variable effect. Therefore, SOC width was significant as predictor for employee engagement, but this specific result may have been caused due to a suppressor effect.

The effect of the bootstrapped result was not significant, with a confidence interval range of 95% CI \([-0.01, .01]\) for job demands, Collegial support 95% CI \([-0.03, .02]\), Job resources 95% CI \([-0.05, .03]\), and 95% CI \([-0.01, .01]\) for leadership. Consequently, mediation of working conditions could not account for the relation between SOC and employee engagement. The total variance that the model explained was 57% (\( p < .001 \)).

The result for the second mediation analysis can be seen in Figure 2.

![Figure 2](image)

Figure 2. Pooled standardized coefficients showcasing the mediating effect of working conditions (job demands, job resources, collegial support and leadership) on the relationship between SOC and employee engagement. A represents the association between SOC and employee engagement on its own while B represents the relationship between the two variables when the selected mediators are included into the analysis. 

\( N = 1551, \ *p < .05, \ **p < .01, \ ***p < .001. \)

**Discussion**

The purpose of this study was to assess the association between SOC and public-sector employees’ working conditions (job demands, resources and leadership) and health as well as engagement. The study also explored if SOC width could predict employee health or engagement, where possible mediation of working conditions was examined.

In regard to the first research question, the result showed that a wide SOC had a significant negative relationship with job resources, collegial support and engaged leadership,
indicating that a narrow SOC may increase work resources for employees. Meanwhile, no association was found between SOC and job demands, which was unexpected in comparison to previous research. For example, wide SOC has previously been associated with an increase in amount of job demands per employee (Bothe & Meier, 2001), while in the present study no relationship was found. One possible explanation for this could be that the majority of the respondents may perform routine based tasks on a daily basis. Wide SOC in combination with routine-based tasks does not necessarily cause as much stress as if the daily tasks are of complex and diverse nature (Theobald & Nicholson-Crotty, 2005; Visser, 2000).

For job resources, the result was in line with previous research where a wide SOC has been associated with a decrease in the amount of resources available (Meier & Bohte, 2000). However, taking into consideration the present result for SOC’s effect on job demands, a possible inference for this specific study could be that a narrow SOC leads to higher amount of resources, but that a wide SOC did not lead to an increase in the amount of perceived demands. Evidence of this was that the pooled mean values for the variables were on the high end, indicating that a clear majority experienced good working conditions.

The sub dimension of job resources, collegial support, also had a negative significant relationship with SOC width, indicating that narrow SOC may be beneficial for the overall workplace environment. Since a wide SOC was associated with inferior collegial support, it could be argued that the reforms that NPM introduced were for the worse in terms of dialogue and social characteristics of work for employees in the public sector. The financial ratio emphasis of NPM reforms have led to an increase of SOC width for managers, which was associated with a decrease in perceived collegial support in the present study (Noordegraaf & Abma; 2003; Szücs et al., 2003).

The result concerning SOC widths association with engaged leadership was to certain extent in line with previous research, where a wide SOC has been found to mitigate the impact that leadership style has (Schyns et al., 2012; Simpson et al., 2017). In this respect, Perko et al. (2017) found that high perceived job demands were linked to a decrease in the employees’ reflection of how fair the leadership was as well as an increase in abusiveness. Since the present result indicate that a wide SOC is negative for perceived leadership in comparison to a narrow one, the result could be interpreted as strengthening to the belief that the decentralization in public sector was, in terms for the employees, of negative effect (Ashcraft, 2013; Thylefors, 2007).

Bakker and Demerouti (2018) mentioned leadership as a possible addition as its own category within job resources. In the present study, positive associations were found between work demands, resources and engaged leadership, while a narrow SOC was only associated with the perception of the leadership and resources. Although it is difficult to draw any conclusions from the result, it could indicate that leadership should be regarded as its own category. Further research is needed in order to establish the role that engaged leadership may play, both regarding SOC and its place within the JD-R model.

Concerning research questions 2 and 3, the result of the mediation analysis highlighted that SOC could predict employee engagement and health, but that working conditions did
not mediate the effect of SOC on the outcome variables. Most results regarding health and employee engagement has been in relation to job demands and resources. For instance, the association between high work demands and low amount of resources effect on psychosocial well-being has been verified in previous research (Demerouti et al., 2001; Sverke et al., 2016; Van den Broeck et al., 2013). Furthermore, the relation in the present study between SOC and employee engagement has been shown in previous research, where a wide SOC led to a decrease in engagement (Schaufeli, 2015; Shuck & Herd, 2012). However, the presents study’s result does not entirely support previous findings. The association between SOC width and engagement was negative while when used as a predictor in the mediation analysis, it changed to a positive relationship, possible indicating a suppressor variable effect.Suppressor variable effect would mean that the variable itself has close to zero association with the selected criterion variable (engagement) but has a relationship with the mediation variables (working conditions), which causes it to suppress extraneous variance of the mediation variables (Pedhazur, 1997). The suppression of the mediation variables variance would cause an increase in the partial association between SOC and engagement, thereby possibly creating a false association. Nonetheless, the possible effect of SOC width on employee engagement, both regarding the association between them and predictor capability, was weak in effect. Therefore, taking into consideration the possible suppressor outcome and the weakness in power between the variables, the result between SOC and employee engagement should be assessed with caution.

One important finding in the present study was that SOC width was a predictor for employee health. This result provides slight validation to the claim that the decentralization reforms in the public sector, which led to increase SOC width, were negative for the employees in terms of psychosocial well-being (Noordegraaf & Abma; 2003; Szücs et al., 2003). Previous research has shown that a wide SOC leads to decreased resources and increased work load, which in turn may affect occupational stress (Bothe & Meier, 2001; Wallin et al., 2014). Meanwhile, few studies have found an association between SOC width and employee health. The present result therefore adds to the finding of Holm-Petersen et al. (2017), where decreasing the managers’ SOC width led to improved psychosocial working conditions. Furthermore, It also provides support to the possible intervention method of decreasing the width of managers SOC to improve employee well-being, as suggested by Vinberg et al. (2015).

However, considering the mentioned result in combination with previous research, it was surprising that working conditions had no mediating effect on either employee health or engagement. Narrow SOC has generally been found to increase the amount of resources available, which was also the case in the present study (Bothe & Meier, 2001). Sufficient amount of resources has as well been linked towards improved employee health and reduced occupational stress (Demerouti et al., 2001; Näswall et al., 2008; Bakker et al., 2010; Van den Broeck et al., 2013). Since SOC may affect the amount of resources available and the latter in turn impacts health, it was considered that mediation of working conditions may account for the association between SOC and health. Based on previous research, the same type of reasoning could be argued for the relationship between SOC, working conditions and employee engagement (Schaufeli, 2015; Shuck & Herd, 2012). The present result might indicate that working conditions is not of importance for the possible association between SOC and employee health as well as engagement.
Alternatively, other explanations may be considered. Since the sample included 1551 participants with no covariate variables being accounted for in the mediation analysis, it is possible that the result missed possible confounders. For example, Björk and Härenstam (2016) found that female supervisors had worse prerequisites in the workplace in comparison to male managers. Since the present study could not account for gender for either the managers or for the employees, it is possible that interaction effects could have led to alternative results in terms of possible mediation effects.

Another possible explanation behind the result of the mediation analysis is in regard to the type of operation categories within the municipality. The result of the ANOVA showed that the operations differed in SOC width between each other. Considering that previous research has indicated that the impact of SOC may be negated by type of organization (Meier and Bohte, 2000; Mintzberg, 1993), it is possible that type of operation could have had impact on the result. Furthermore, type of operation can vary in itself, i.e. that there are different sub-sections within an operation handling different types of task. Consequently, methodological concerns could be considered as an alternative explanation behind results in the present study.

**Limitations**

One purpose of the present study was to investigate any possible association between SOC, working conditions and two different outcomes. For this type of research purpose, a correlation analysis can help in providing answers. However, considering that the study was of cross-sectional design, causality between variables may be difficult to establish (Gelo, Braakman & Benetka, 2008). Nonetheless, the width of a supervisors SOC can in terms of association between variables not be affected by the other. In other words, it cannot be argued that high job resources led to a narrow SOC. Therefore, regarding the results for SOC, it can be argued that it may have direct casual effect. The same cannot be said for the other variables possible effect on health and employee engagement.

Another methodological concern was the use of self-reported questionnaires for collecting the respondent data, which may lead to biases regarding possible associations between variables (Spector, 2006). The measurement method for the key variable in the present study, SOC width, was measured objectively using register data, which means that it cannot be affected by common method variance. Spector (2006) also argued that despite the potential shortcoming of self-reported data, it is still the most appropriate method in comparison to the alternatives.

There were further limitations regarding the questionnaires content. For the external validity, there are upsides as well as limitations. One upside was the number of respondents (1551), spread out over different type of operations and occupations, which can increase the generalizability (Shultz & Whitney, 2013). However, since the data was collected by an external organization, the questionnaire used was not optimal in terms of design for all purposes of the study. One limitation was the lack of demographic data, where both age and gender could have been factors that were significant on their own regarding SOC and the outcome variables, but also in terms for the mediation analysis. Furthermore, in future research it may be of value to measure task difficulty as a possible confounder for the association between SOC and job demands as well as type of operation.
Since an external organization had constructed the questionnaire based on theoretical framework from Bassi and McMurrer (2006), while the JD-R model was used as framework for the present study, the construct validity of the study may be a limitation. All variables in the study, except SOC, were established using face validity in combination with several EFA’s. This led to that dimensions of, for example job demands, were not optimal to measure, which could have restricted the result between SOC and job demands. The validity of the study relies on the EFA’s, which had sufficient values, but which in turn does not necessarily include all dimensions of the theoretical framework. The authors of the JD-R model have emphasized that an important aspect of the model is that it allows for measurements instruments to be adapted or tailored for a specific need or sample. Although the JD-R constructs were not tailored for a specific sample, it can still be argued that the model’s flexibility allows for the type of variable creation used in the present study (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004). The EFA criterions used were based on DeVellis (2002) recommendations and the face validity to assign items to different categories were grounded on theoretical frameworks. DeVellis (2002) states that when constructing new measurement index, EFA’s are key tools for investigating the validity. If the EFA’s criterions are fulfilled, in combination with that the construct is based on a theoretical framework, it can be considered adequate concerning the validity. Furthermore, one of the main variables in the study, SOC width, were measured using register data, meaning that it can not have validity concerns.

Another possible limitation was that health was measured using a single-item measurement. Since Cronbach alpha is not a valid method to use for single-item constructs, no assessment was made regarding the reliability of health as construct. However, previous research has found robust results for single-item measures for examining self-rated health when using the test-retest reliability method (Lundberg & Manderbacka, 1996). Furthermore, the use of a single-item measurement for health has in previous research been correlated to multiple-item measures of health-related scales, which is evidence of concurrent validity (Cunny & Perri, 1991). Consequently, the validity concerns that the use of an external questionnaire causes is to certain extent moderated regarding the results for health and SOC width. Meanwhile, the validity of employee engagement does not have foundation in previous research.

Finally, the associations between SOC and other variables was weak in effect, which may be a limitation regarding the reliability of the result. They were however significant at a prominent level. Furthermore, large sample size increases the possibility of a result to be applicable for a wide-ranging population. The fact that the results found concerning SOC were not high in effect could be problematic for generalizing the findings of the study. However, the aim of the study was of exploratory purpose, in the sense of investigating the possible effects of SOC on working conditions (job demands, job resources and leadership), health and employee engagement. Therefore, the result of the study should be evaluated as a building stone for future research to add to.

Conclusions
The result of the present study indicated that the public sector as whole may suffer from systematic differences in structural settings for supervisors, which could distress the employees overall psychosocial well-being. Future research should emphasis
investigating the effect of the managers’ SOC for the employees’ psychosocial well-being, possibly using a multi-level analysis which could include demographic factors and possible confounders such as task difficulty and type of operation. If the width of SOC do affect health, it could consequently affect the organizational performance as whole. Therefore, further knowledge is of importance regarding the effect of SOC on employee well-being as well as the managers ability to oversee all of their employees, for both moral and economic reasons.
References


Hjalmanson, I., Norman, E., & Trydegård, G. B. (2004). *Om man ska vara stöttepelare åt andra måste man stå stadigt själv* [If you are supposed to support others, you must stand on solid ground yourself]. Stockholm, Sweden: Stiftelsen Stockholms läns äldrecentrum.


Appendix

Exploratory factor analysis

Table A1. Exploratory factor analysis between all constructs.

<table>
<thead>
<tr>
<th>Item</th>
<th>Leader</th>
<th>Employee</th>
<th>Job</th>
<th>Collegial</th>
<th>Job</th>
<th>h2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jag vet vad som förväntas av mig i mitt arbete</td>
<td>.18</td>
<td>.22</td>
<td>-.43</td>
<td>*</td>
<td>*</td>
<td>.51</td>
</tr>
<tr>
<td>I mitt arbete har jag nytta av mina kunskaper och färdigheter</td>
<td>*</td>
<td>*</td>
<td>-.61</td>
<td>*</td>
<td>*</td>
<td>.43</td>
</tr>
<tr>
<td>Arbetet är organiserat på ett effektivt sätt så att jag vet vem som gör vad</td>
<td>*</td>
<td>*</td>
<td>-.63</td>
<td>.16</td>
<td>-.16</td>
<td>.62</td>
</tr>
<tr>
<td>Vi har effektiva arbetsrutiner på min avdelning/enhet</td>
<td>*</td>
<td>*</td>
<td>-.58</td>
<td>.20</td>
<td>-.11</td>
<td>.59</td>
</tr>
<tr>
<td>Jag har tillräckliga kunskaper för att kunna arbeta enligt våra rutiner</td>
<td>*</td>
<td>.18</td>
<td>-.48</td>
<td>*</td>
<td>*</td>
<td>.33</td>
</tr>
<tr>
<td>Jag har tillgång till den information som behövs för att kunna utföra mitt arbete</td>
<td>*</td>
<td>.17</td>
<td>-.61</td>
<td>*</td>
<td>*</td>
<td>.62</td>
</tr>
<tr>
<td>Jag har tydliga mål att arbeta mot inom mitt arbetsområde</td>
<td>*</td>
<td>.12</td>
<td>-.33</td>
<td>*</td>
<td>*</td>
<td>.51</td>
</tr>
<tr>
<td>Jag har tillgång till de instruktionerna och/eller mallar jag behöver i mitt arbete</td>
<td>*</td>
<td>.16</td>
<td>-.36</td>
<td>*</td>
<td>-.59</td>
<td>.61</td>
</tr>
<tr>
<td>I mitt senaste lönegrundande medarbetarsamtal fick jag tydlig återkoppling på hur jag utfört mitt arbete</td>
<td>.15</td>
<td>*</td>
<td>-.11</td>
<td>*</td>
<td>-.37</td>
<td>.39</td>
</tr>
<tr>
<td>Min fysiska arbetsmiljö är tillfredsställande</td>
<td>*</td>
<td>*</td>
<td>-.16</td>
<td>.14</td>
<td>-.34</td>
<td>.27</td>
</tr>
<tr>
<td>Jag kan påverka hur jag utför mitt dagliga arbete</td>
<td>*</td>
<td>.19</td>
<td>-.13</td>
<td>.16</td>
<td>-.49</td>
<td>.38</td>
</tr>
<tr>
<td>Förslag på nya och bättre sätt att arbeta välkomnas</td>
<td>.12</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>-.78</td>
<td>.73</td>
</tr>
<tr>
<td>De förslag som förs fram hanteras på ett bra sätt</td>
<td>.15</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>-.76</td>
<td>.74</td>
</tr>
</tbody>
</table>
Inom (namn) kommun uppmuntras nya idéer  
Jag upplever att det finns goda möjligheter för mig att utvecklas i mitt arbete  
Jag får den kompetensutveckling jag behöver för att kunna utföra mitt arbete på ett bra sätt  
Mina arbetskamrater behandlar mig med respekt  
Jag får uppskattning från mina arbetskamrater när jag gör ett bra arbete  
Det är en bra stämning på min arbetsplats  
Samarbetet fungerar bra inom min avdelning/enhet  
Jag tycker att min närmaste chef ingör förtroende  
Jag tycker att min närmaste chef är öppen och ärlig i sin kommunikation  
Jag tycker att min närmaste chef kommunicerar nyheter och händelser på ett tydligt sätt  
Jag tycker att min närmaste chef kommunicerar mål och strategier på ett tydligt sätt  
Jag tycker att min närmaste chef är tillgänglig  
Jag tycker att min närmaste chef gör det tydligt vad som förväntas av mig  
Jag tycker att min närmaste chef bidrar till att skapa ett

<table>
<thead>
<tr>
<th>Inom (namn) kommun uppmuntras nya idéer</th>
<th>*</th>
<th>*</th>
<th>*</th>
<th>*</th>
<th>-.85</th>
<th>.67</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jag upplever att det finns goda möjligheter för mig att utvecklas i mitt arbete</td>
<td>*</td>
<td>.22</td>
<td>*</td>
<td>.18</td>
<td>-.43</td>
<td>.51</td>
</tr>
<tr>
<td>Jag får den kompetensutveckling jag behöver för att kunna utföra mitt arbete på ett bra sätt</td>
<td>.10</td>
<td>*</td>
<td>-.23</td>
<td>*</td>
<td>-.45</td>
<td>.45</td>
</tr>
<tr>
<td>Mina arbetskamrater behandlar mig med respekt</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>.82</td>
<td>*</td>
<td>.65</td>
</tr>
<tr>
<td>Jag får uppskattning från mina arbetskamrater när jag gör ett bra arbete</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>.71</td>
<td>*</td>
<td>.52</td>
</tr>
<tr>
<td>Det är en bra stämning på min arbetsplats</td>
<td>.11</td>
<td>*</td>
<td>-.15</td>
<td>.54</td>
<td>-.11</td>
<td>.53</td>
</tr>
<tr>
<td>Samarbetet fungerar bra inom min avdelning/enhet</td>
<td>*</td>
<td>*</td>
<td>-.24</td>
<td>.47</td>
<td>*</td>
<td>.55</td>
</tr>
<tr>
<td>Jag tycker att min närmaste chef ingör förtroende</td>
<td>.87</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>.71</td>
</tr>
<tr>
<td>Jag tycker att min närmaste chef är öppen och ärlig i sin kommunikation</td>
<td>.91</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>.79</td>
</tr>
<tr>
<td>Jag tycker att min närmaste chef kommunicerar nyheter och händelser på ett tydligt sätt</td>
<td>.80</td>
<td>*</td>
<td>-.14</td>
<td>*</td>
<td>*</td>
<td>.72</td>
</tr>
<tr>
<td>Jag tycker att min närmaste chef kommunicerar mål och strategier på ett tydligt sätt</td>
<td>.76</td>
<td>*</td>
<td>-.23</td>
<td>*</td>
<td>*</td>
<td>.73</td>
</tr>
<tr>
<td>Jag tycker att min närmaste chef är tillgänglig</td>
<td>.69</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>.51</td>
</tr>
<tr>
<td>Jag tycker att min närmaste chef gör det tydligt vad som förväntas av mig</td>
<td>.75</td>
<td>*</td>
<td>-.20</td>
<td>*</td>
<td>*</td>
<td>.72</td>
</tr>
<tr>
<td>Jag tycker att min närmaste chef bidrar till att skapa ett</td>
<td>.88</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>.76</td>
</tr>
<tr>
<td>Jag tycker att min närmaste chef bidrar till att skapa ett</td>
<td>.84</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>.79</td>
</tr>
</tbody>
</table>
bra arbetsklimat i arbetsgruppen

Jag tycker att min närmaste chef behandlar mig med respekt .90 * .16 * * .74

Jag tycker att min närmaste chef har ett beteende som överensstämmer med våra värderingar .92 * .13 * * .77

Jag tycker att min närmaste chef underlättar genom att ta bort onödiga hinder i arbetet som jag eller vi i vår arbetsgrupp har påtalat .73 * * * * .76

Jag tycker att min närmaste chef ger mig det stöd jag behöver .88 * * * * .83

Jag tycker att min närmaste chef ger mig konstruktiv återkoppling på hur jag utför mitt arbete .76 * * * * .67

Min närmaste chef visar uppskattning för mina arbetsinsatser .71 * * * -.13 .71

Min närmaste chef ger mig förutsättningar att ta ansvar i mitt arbete .59 .16 * * -.13 .67

Totalt sett är jag nöjd med min arbetssituation * .39 -.17 .15 * .52

Jag upplever att mitt arbete är meningsfullt * .83 * * * .71

Mitt arbete känns meningsfullt * .78 * * * .70

Jag ser fram emot att gå till arbetet * .44 * .16 -.22 .55

Mitt arbete engagerar mig * .73 * * * .56

| Eigenvalue | 17.76 | 2.93 | 1.20 | 1.09 | 1.01 |
| Percent of variance | 45.55 | 7.51 | 3.08 | 2.76 | 2.59 |

Loadings < 0.1; extraction method: Principal axis factoring; rotation method: oblimin with Kaiser normalization; rotation converged in 12 iterations.