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Linköping University Post Print

N.B.: When citing this work, cite the original article.

Original Publication:
http://dx.doi.org/10.1097/JOM.0b013e31829b27df
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http://www.lww.com/

Postprint available at: Linköping University Electronic Press
http://urn.kb.se/resolve?urn=urn:nbn:se:liu:diva-95575
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Conflict of Interest and Source of Funding

The authors have no conflicts of interest to report.

This work was funded by HELIX VINN Excellence Centre, Linköping University, Sweden.

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Investigating Work Conditions and Burnout at Three Hierarchical Levels

Objective: To investigate the differences in work conditions and symptoms of burnout, and the association between work conditions and symptoms of burnout at the three hierarchical levels: subordinates, first-line managers and middle managers. Methods: Analyses were based on questionnaire data from 4096 employees in nine organizations, containing three hierarchical levels: subordinates (n=3659), first-line managers (n=345), and middle managers (n=92). Results: Work conditions were found to differ between the three hierarchical levels, mostly between subordinates and managers. Managers experienced fewer symptoms of burnout than subordinates. Furthermore, the association between work conditions and burnout differed for subordinates, first-line managers and middle managers. Conclusions: Occupational health research needs to focus more on differences between hierarchical levels regarding work conditions and burnout.
INTRODUCTION

The relation between work conditions and burnout has been thoroughly investigated, but little attention has been paid to differences between hierarchical levels in organizations regarding this relation. Some studies suggest that managers and subordinates have different work conditions, but the association between work conditions and burnout is rarely compared. Managers usually experience higher demands, more conflicts at work and more conflicts between work and private life than subordinates. Managers also experience higher control, higher autonomy, more influence, more freedom at work, and more social support than subordinates.

Managers are generally found to have better health than subordinates. Some studies have also found that managers experience less stress than subordinates. Differences in health or stress between managers and subordinates are usually explained in terms of managers having more influence and more opportunities for adjusting their work. Thus, although managers have very demanding work, they also have more control, influence and information than subordinates do, and it is supposed that this mitigates the effect of their experienced demands.

A problem in previous research is that managerial levels are rarely differentiated, even though some studies have shown that managers at different managerial levels have different work tasks. The work tasks of first-line managers tend to be operational, short term, and focused on facilitating the work tasks of subordinates; while middle managers’ work tasks tend to be more strategic, long term and focused on facilitating the work groups’ performance. The higher the managerial level, the more opportunities there are to adjust the assignment. Middle managers have more resources, more information and higher autonomy than first-line managers, which decreases stress and increases health.
managers perceive conflicting demands as important for their health and stress; while reward, recognition, control and possibility to influence are important for first-line managers’ health.\textsuperscript{24,25} Also, managers in higher managerial levels have better health than managers in lower managerial levels.\textsuperscript{13}

Despite research showing that employees at different hierarchical levels have different work conditions, the association between work conditions and ill-health is rarely studied with designs that enable comparisons between hierarchical levels in the same organizations. For instance, managers and subordinates may experience the same degree of role ambiguity, but it is experienced as more stressful for managers.\textsuperscript{26} Instead, it is generally presumed that work conditions have the same importance, regardless of hierarchical level. An exception is Cooper and Bramwell’s\textsuperscript{6} study on brewing personnel in Scotland. They compared the associations between work conditions, job satisfaction and health for subordinates and first-line managers. Their results showed that the same work conditions were associated with job satisfaction for both subordinates and first-line managers, and that some work conditions were differently associated with managers’ health than with subordinates’ health. However, their study was undertaken in one particular organization with a low response rate. Furthermore, they only included managers at one managerial level.

Considering these issues, the objective of this study is threefold: (1) to compare the differences in work conditions in three hierarchical levels: subordinates, first-line managers and middle managers; (2) to compare symptoms of burnout between subordinates, first-line managers and middle managers; and (3) to investigate if the association between work conditions and burnout differs for subordinates, first-line managers and middle managers.

METHOD
Sample and procedures

The material was based on questionnaire data from nine different organizations in Sweden: four municipalities, one industrial company, two governmental agencies, one hospital and one private healthcare company. The researchers contacted representatives in each organization and asked if they were interested in participating in the study. Organizations from different sectors were selected to ensure variety of the material. If they agreed to participate, questionnaires were sent to their employees (N=6841). For confidentiality purposes, each respondent sent the completed questionnaire back to the researchers. A reminder was sent after two seeks, and a second reminder after another two weeks. A total of 4096 employees (60%) responded to the questionnaire. The organizations’ response rate varied between 52 percent and 78 percent. Of the respondents, 3659 were subordinates, 345 first-line managers and 92 middle managers. The response rate for subordinates was 57 percent, for first-line managers 84 percent, and for middle managers 74 percent (Table 1). In this study, a manager was defined as an employee with personnel and budgetary responsibilities. A first-line manager had at least one subordinate without managerial responsibilities, while a middle manager had at least one subordinate with managerial responsibilities. All questionnaires were coded so that each respondent was connected to the organization in which they were working, to their hierarchical level, and to their immediate manager. This coding procedure made it possible to follow the hierarchical order in each organization, and thereby control for potential bias of heterogeneity in organizations and work groups of each hierarchical level.

Ethics

Ethical principles for social science have been fulfilled. The study was approved by the Ethics Committee at Linkoping University.
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Measures

Work conditions

The work condition variables were demands (5 items) and control (6 items) from the Job Demand Control (JDC) model by Karasek and Theorell, relating to mental workload and the ability to use and develop skills. One example item capturing demands is: “Do you have to work very fast?”. The response scale ranges from Yes, often (1) to No, never (4). Cronbach’s alpha for demands was .80 and for control .70. Social capital at work (8 items) captures efficacy of social capital, indicating whether people feel respected, valued and treated as equals. One example item is: “People feel understood and accepted by each other”, ranging from Fully disagree (1) to Fully agree (5). Cronbach’s alpha for social capital was .90. Scales on role clarity (3 items), role conflict (3 items), and interactions between work and private life (2 items) were taken from the QPS Nordic. One example item capturing role conflict is: “Do you have to do things that you feel should be done differently?” and the response scale ranged from Very seldom or never (1) to Very often or always (5). Cronbach’s alpha for role clarity was .75, for role conflict .66 and for interactions between work and private life .63. Information regarding span of control was provided from the organizations.

The three items used to investigate opportunities to adjust work, e.g. when feeling out of sorts, were: “Can you work at a slower pace?”, “Can you shorten the workday?” and “Can you get help from work colleagues?”. The response scales ranged from Always (1) to Seldom/never (3).

Burnout

Symptoms of burnout were measured by the generic part of the Copenhagen Burnout Inventory (CBI). The scale is intended to answer the question “How tired or exhausted are
Investigating work conditions and burnout at three

you?”, and the response scale is a 5-point Likert scale (1 = Always, 5 = Never/almost never). Cronbach’s alpha for burnout was .89. The range of the scale is 0-100, where the first category (always) is scored 100 and the fifth category (never/almost never) is scored 0.

Control variables

Sex, age, and education level were used as control variables, as previous research has shown that these factors are associated with self-rated health. The respondents in the material belonged to different work groups, worked in different organizations and in different sectors. To control for the possible effect of these differences, three nested variables were created: 1) the subordinates and their managers were matched, 2) first-line managers and their managers were matched, 3) middle managers and their organization were matched. By using these variables we focus on differences in hierarchical levels, rather than differences between work groups or organizations, and our results thus become more generalizable.

Statistical analysis

Differences in demographics between subordinates, first-line managers and middle managers were examined using chi-square test and Fisher’s exact test.

The distribution of the means and standard deviations for work conditions and burnout among subordinates, first-line managers and middle managers were calculated using ANOVA. The Games-Howell post hoc-test was used due to the unequal sample sizes.

The relationship between the variables was examined using Pearson correlation analysis.

To investigate the associations between work conditions and burnout, multiple linear regressions were performed (method Enter). To ensure validity of the multiple regression
Investigating work conditions and burnout at three models, power was calculated. According to the test, power was satisfactory (> .97) for the three hierarchical groups.\(^\text{36}\)

Missing scores on single questions was handled in accordance with previous research.\(^\text{37}\) A total score was calculated for a person if the person has answered at least half of the questions of the scale. The missing items were given the average score of the other items in the scale. SPSS Version 19.0 (Armonk, NY: IBM Corp) was used for statistical analysis.

**RESULTS**

**Descriptive statistics**

Demographic factors are presented in Table 1. In total, there were more women (66%) than men (34%). The total mean age was 47.2 years. The mean age was 47.3, 47.1 and 46.5 for subordinates, first-line managers, and middle managers respectively.

Nearly half of the respondents (48%) had a secondary education. A university degree was held by most (85%) of the middle managers, half (52%) of the first-line managers and 42 percent of the subordinates.

**Non-response analysis**

Differences between respondents and non-respondents were analysed on available data (sex and age). Respondents (\(M: 47.08; SD: 11.21\)) were older than non-respondents (\(M: 43.66; SD: 16.13\)) (\(t(6725) = 10.26, p < .001\)). There were no significant differences between the sexes.

[Insert Table 1 about here]
Correlations

Correlations between all variables for measuring work conditions and burnout are presented in Table 2. In general, correlations were low, but significant. Highest correlations were found between demands and role conflict ($r = .53, p < .01$), interactions between work and private life and burnout ($r = .47, p < .01$), and demands and interactions between work and private life ($r = .43, p < .01$).

[Insert Table 2 about here]

Differences in work conditions and burnout

Work conditions and burnout were compared between subordinates, first-line managers and middle managers across the organizations (Table 3). The result showed that managers rated demands ($p = .002$), control ($p < .001$) and social capital ($p < .001$) as significantly higher than subordinates, while no difference were found between first-line managers and middle managers. There were no differences in role clarity and role conflict between the three hierarchical levels. Middle managers rated interactions between work and private life ($p < .001$) as significantly higher compared to subordinates and first-line managers. First-line managers had a larger span of control than middle managers ($p < .001$).

Regarding opportunities for adjusting work, significant differences were found between subordinates and middle managers. Middle managers had more opportunities to work at a slower pace than subordinates ($p = .001$), while subordinates had more opportunities to get
help from work colleagues ($p = .045$). Middle managers also had more opportunities to shorten their workday ($p < .001$) than both subordinates and first-line managers. Subordinates had higher level of burnout symptoms than managers ($p < .001$), while no differences were found between first-line and middle managers.

[Insert Table 3 about here]

**Associations between work conditions and burnout**

Multiple linear regressions were used to investigate the relationship between the work condition variables and burnout (Table 4). For subordinates, interactions between work and private life ($p < .001$), demands ($p < .001$), and role conflict ($p < .001$) were associated with more symptoms of burnout, while social capital ($p < .001$), control ($p < .001$) and opportunities to shorten the workday ($p = .004$) were associated with fewer symptoms of burnout. For first-line managers, interactions between work and private life ($p < .001$), demands ($p < .001$), and opportunities to get help from work colleagues ($p = .004$) were associated with more symptoms of burnout, while social capital ($p < .001$) was associated with fewer symptoms of burnout. For middle managers, role conflicts ($p = .030$), demands ($p = .031$) and opportunities to get help from work colleagues ($p = .027$) were associated with more symptoms of burnout, while opportunities to shorten the workday ($p = .012$) were associated with fewer symptoms of burnout. The explained variance was highest for middle managers ($R^2 = .510$) and lowest for subordinates ($R^2 = .328$).

[Insert Table 4 about here]
DISCUSSION

This study investigated the differences between subordinates, first-line managers and middle managers with regard to work conditions and symptoms of burnout respectively, and the associations between work conditions and burnout at the three hierarchical levels. The main contribution of this study is that the relationship between work conditions and burnout is found to differ at the three hierarchical levels.

Hierarchical differences in burnout and work conditions

The results showed that managers experienced fewer symptoms of burnout than subordinates did. This is in line with earlier research showing that managers generally have better health than subordinates. Managers have a demanding work situation, but their better health is often explained by managers having more resources to handle these demands than subordinates do. Compared with subordinates, the managers in our study experienced higher demands and more negative interactions between work and private life. Managers, particularly middle managers, also had more control, more social capital and more opportunities to adjust their work. As suggested in previous research, better control and social capital for managers may mitigate the negative effects of the demanding work conditions and result in fewer symptoms of burnout than for subordinates. The fact that it is possible for employees to adjust their work, e.g. when feeling out of sorts, constitutes an important resource to handle stress and a possible mediating factor between stress and health outcomes.

Hierarchical differences in the relation between work conditions and burnout
Our study further showed that the three hierarchical levels differed with regard to which work conditions were associated with symptoms of burnout. The three most important work conditions associated with burnout were the same for subordinates and first-line managers. The work conditions of middle managers that were associated with burnout differed somewhat from the other two.

For subordinates and first-line managers, interactions between work and private life were strongly associated with burnout. It is well-known that negative interactions between work and private life have detrimental effects on well-being and ill-health, while influence and autonomy over work has been shown to mitigate these effects. Managers, particularly middle managers, have more opportunities to adjust their assignments in order to handle demands in their private life. Subordinates have fewer such opportunities. Further, first-line managers and middle managers have different responsibilities, and different requirements for being present at work. First-line managers are responsible for daily work operations, and this requires that they are present in everyday work. Therefore they may be unable to take advantage of the adjustment opportunities available to them. In contrast, middle managers’ work tasks are more strategic and long-term, which makes it easier for them to take a day off if necessary.

Social capital and social support has been shown to reduce stress and strain. In our study, social capital was associated with fewer symptoms of burnout for subordinates and first-line managers. For middle managers, the association between social capital and burnout was not significant. Middle managers usually have fewer colleagues to turn to than for instance subordinates. Research on managers’ networking also shows that they have many contacts outside their workplace. However, social capital, as measured in this study, concerns capital within the workplace. Social capital at work may not be associated with fewer symptoms of burnout for middle managers as they rely on contacts outside their
Investigating work conditions and burnout at three workplace, as indicated in other studies. Furthermore, our results showed that opportunities to get help from work colleagues were associated with more symptoms of burnout for both first-line and middle managers. Research has shown that supportive relations within the workplace can be problematic for managers, and may explain why help from colleagues within the workplace was related to more symptoms of burnout.

Role conflict was highly related to symptoms of burnout for middle managers. Role conflict has been emphasized as a common problem in working life, especially for managers. Our results suggest that role conflicts are equally present at all hierarchical levels, although they may have more impact on middle managers’ burnout. Managers often take a buffer role to protect their subordinates. Thus, the role conflicts experienced by subordinates may be transferred to their managers for them to handle, thereby decreasing the importance of role conflicts for subordinates and increasing its importance for managers. Furthermore, there may be different types of role conflicts at different hierarchical levels. Managers are caught in a cross-pressure situation between superior managers and subordinates, and these two constituents are vital for the performance of managers’ work tasks. Conflicts that arise between them have consequences for the managers’ task fulfilment, which may result in increased symptoms of burnout. Subordinates’ constituents may not affect their task fulfilment; the constituents may for instance be outside the organization, and are therefore less important for the subordinates’ symptoms of burnout.

Surprisingly, span of control was not related to managers’ burnout, despite the fact that this has been suggested as an important stressor for managers. Span of control may contribute to a larger support network, boundary spanning etc. that may buffer the negative outcomes.
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In summary, our study shows that managers have reasonably similar work conditions, regardless of managerial level. The differences in work conditions and symptoms of burnout were mostly between subordinates and managers, and fewer differences were found between the two managerial levels. Despite these similarities, our results showed that different work conditions were associated with symptoms of burnout at different hierarchical levels. The work conditions associated with symptoms of burnout were similar for subordinates and first-line managers, while middle managers differed. The work tasks of first-line managers and subordinates are often interlinked; they often work in the same place and encounter the same problems. These similarities in the work may result in similar work conditions being related to symptoms of burnout. Middle managers, on the other hand, are often not as present in the daily work, their responsibilities are often more strategic and less operational, and the daily problems that first-line managers and subordinates have to solve tend to only involve the middle managers indirectly. Additionally, middle managers have better opportunities than first-line managers and subordinates to adjust their assignments to handle demands placed on them. Thus, managers at the two managerial levels have different work tasks and prerequisites for performing or accomplishing these work tasks, resulting in different work conditions being associated with symptoms of burnout.

Limitations and future research

This study was based on extensive material containing three hierarchical levels, and all respondents answered the same questionnaire. The questionnaire that was used consisted of well-established and validated instruments, providing opportunities to generalize the results. A limitation is that the material consists of self-reported data. Nonetheless, Härenstam et al. suggest that self-reported work conditions are similar to objectively measured work conditions.
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The design of the study made it possible to match subordinates and their managers, allowing us to control for the possible effect of differences in organizations and work groups. However, the material was cross-sectional and the results should be interpreted as such. In order to strengthen our interpretations, longitudinal material is needed.

As different work conditions seem to be important for burnout at different hierarchical levels, future research should continue to investigate this relationship with particular focus on potential reasons or causes for these differences, for instance, by asking employees at different hierarchical levels to describe their work conditions and why they are important.

Conclusions

The results of our study imply that occupational health research needs to focus more on differences in work conditions and burnout, and the relation between them, at different hierarchical levels. Access to resources and opportunities to use them for handling stressful work conditions may vary depending on the employees’ hierarchical level. Recognition of differences in hierarchical levels will clarify and improve risk assessments and the study of detrimental work conditions.

REFERENCES


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TABLE 1. Demographic factors distributed among respondents

<table>
<thead>
<tr>
<th></th>
<th>Subordinates</th>
<th>First-line managers</th>
<th>Middle managers</th>
<th>Total</th>
<th>p</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td>n (%)</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Women</td>
<td>2420(67)</td>
<td>230(68)</td>
<td>50(55)</td>
<td>2700(66)</td>
<td>.055</td>
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<tr>
<td>Men</td>
<td>1215(33)</td>
<td>108(32)</td>
<td>41(45)</td>
<td>1364(34)</td>
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</tr>
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<td>Age</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>18-30 years</td>
<td>290(8)</td>
<td>21(6)</td>
<td>4(4)</td>
<td>315(8)</td>
<td>.082</td>
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<td>31-40 years</td>
<td>744(21)</td>
<td>63(19)</td>
<td>20(22)</td>
<td>827(21)</td>
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<td>41-50 years</td>
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<td>107(33)</td>
<td>34(38)</td>
<td>1114(28)</td>
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<td>51-60 years</td>
<td>1117(32)</td>
<td>108(33)</td>
<td>25(28)</td>
<td>1250(31)</td>
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<td>61 years and older</td>
<td>435(12)</td>
<td>29(9)</td>
<td>7(8)</td>
<td>471(12)</td>
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<td>Education</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Primary</td>
<td>305(8)</td>
<td>16(5)</td>
<td>3(3)</td>
<td>324(8)</td>
<td>&lt;.001</td>
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<td>Secondary</td>
<td>1810(50)</td>
<td>146(43)</td>
<td>11(12)</td>
<td>1967(48)</td>
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<td>University</td>
<td>1515(42)</td>
<td>178(52)</td>
<td>77(85)</td>
<td>1770(44)</td>
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Table 2. Mean, standard deviation and bivariate correlations between the variables (n=4069).

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<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
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<td>1. Demands</td>
<td>13.68</td>
<td>2.94</td>
<td>-</td>
<td></td>
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<tr>
<td>2. Control</td>
<td>18.05</td>
<td>2.85</td>
<td>.02</td>
<td>-</td>
<td></td>
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<tr>
<td>3. Social capital</td>
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<td>0.73</td>
<td>-.25**</td>
<td>.23**</td>
<td>-</td>
<td></td>
<td></td>
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<tr>
<td>4. Role clarity</td>
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<td>0.67</td>
<td>-.15**</td>
<td>.02</td>
<td>.38**</td>
<td>-</td>
<td></td>
<td></td>
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<td>5. Role conflict</td>
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<td>0.87</td>
<td>.53**</td>
<td>-.09**</td>
<td>-.36**</td>
<td>-.25**</td>
<td>-</td>
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<td>6. Interactions</td>
<td>3.75</td>
<td>1.67</td>
<td>.43**</td>
<td>.04*</td>
<td>-.27**</td>
<td>-.23**</td>
<td>.39**</td>
<td>-</td>
<td></td>
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<tr>
<td>7. Opportunities</td>
<td>2.21</td>
<td>0.60</td>
<td>.23**</td>
<td>-.17**</td>
<td>-.13**</td>
<td>.00</td>
<td>.15**</td>
<td>.09**</td>
<td>-</td>
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<tr>
<td>8. Opportunities</td>
<td>2.29</td>
<td>0.61</td>
<td>-.02</td>
<td>-.17**</td>
<td>-.11**</td>
<td>.09**</td>
<td>.02</td>
<td>.02</td>
<td>.36**</td>
<td>-</td>
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<tr>
<td>9. Opportunities</td>
<td>1.86</td>
<td>0.65</td>
<td>.23**</td>
<td>.01</td>
<td>-.30**</td>
<td>-.19**</td>
<td>.17**</td>
<td>.22**</td>
<td>.20**</td>
<td>.07**</td>
<td>-</td>
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<tr>
<td>10. Span of</td>
<td>13.13</td>
<td>12.57</td>
<td>.24**</td>
<td>.12*</td>
<td>-.05</td>
<td>-.10*</td>
<td>.11*</td>
<td>.06</td>
<td>.09</td>
<td>-.04</td>
<td>.16**</td>
<td>-</td>
</tr>
<tr>
<td>11. Burnout</td>
<td>35.87</td>
<td>18.00</td>
<td>.38**</td>
<td>-.16**</td>
<td>-.31**</td>
<td>-.16**</td>
<td>.35**</td>
<td>.47**</td>
<td>.11**</td>
<td>.09**</td>
<td>.15**</td>
<td>.10*</td>
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</table>

*p<.05; **p<.01
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<table>
<thead>
<tr>
<th></th>
<th>Subordinates (n=3648)</th>
<th>First-line managers (n=345)</th>
<th>Middle managers (n=92)</th>
<th>ANOVA</th>
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<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
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<tr>
<td>Demands</td>
<td>13.62 (2.98)</td>
<td>14.08 (2.66)</td>
<td>14.34 (2.45)</td>
<td>F (2, 4066) = 6.20, p = .002</td>
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<tr>
<td>Control</td>
<td>17.85 (2.88)</td>
<td>19.56 (1.93)</td>
<td>20.08 (1.96)</td>
<td>F (2, 4073) = 83.25, p &lt; .001</td>
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<tr>
<td>Social capital</td>
<td>3.84 (0.74)</td>
<td>4.17 (0.59)</td>
<td>4.00 (0.65)</td>
<td>F (2, 4074) = 33.72, p &lt; .001</td>
</tr>
<tr>
<td>Role clarity</td>
<td>4.33 (0.68)</td>
<td>4.32 (0.62)</td>
<td>4.37 (0.69)</td>
<td>F (2, 4081) = 0.20, p = .817</td>
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<tr>
<td>Role conflict</td>
<td>2.88 (0.88)</td>
<td>2.83 (0.81)</td>
<td>2.89 (0.67)</td>
<td>F (2, 4056) = 0.51, p = .600</td>
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<tr>
<td>Interactions between work and private life</td>
<td>3.72 (1.67)</td>
<td>3.92 (1.60)</td>
<td>4.41 (1.50)</td>
<td>F (2, 4066) = 9.63, p &lt; .001</td>
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<tr>
<td>Opportunities to work at a slower pace</td>
<td>1.78 (0.60)</td>
<td>1.85 (0.57)</td>
<td>1.98 (0.52)</td>
<td>F (2, 4061) = 7.15, p = .001</td>
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<tr>
<td>Opportunities to shorten the workday</td>
<td>1.69 (0.61)</td>
<td>1.81 (0.56)</td>
<td>2.05 (0.43)</td>
<td>F (2, 4061) = 20.95, p &lt; .001</td>
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<tr>
<td>Opportunities to get help from work colleagues</td>
<td>2.15 (0.66)</td>
<td>2.13 (0.58)</td>
<td>1.98 (0.61)</td>
<td>F (2, 4066) = 3.11, p = .045</td>
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<tr>
<td>Span of control</td>
<td>-</td>
<td>14.67 (13.38)</td>
<td>7.34 (6.07)</td>
<td>F (2, 435) = 26.18, p &lt; .001</td>
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<tr>
<td>Burnout</td>
<td>36.52 (18.07)</td>
<td>30.25 (16.80)</td>
<td>31.34 (14.75)</td>
<td>F (2, 4077) = 22.31, p &lt; .001</td>
</tr>
</tbody>
</table>
Investigating work conditions and burnout at three

<table>
<thead>
<tr>
<th>Table 4. Multiple regression analysis of subordinates’, first-line managers’ and middle managers’ burnout executed on work conditions ($R^2$, standardized beta coefficient and $p$-value), adjusted for sex, age, education and organization/work group.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Subordinates (n = 3527)</strong></td>
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<tr>
<td>Interactions between work and private life</td>
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<tr>
<td>Demands</td>
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<tr>
<td>Social capital</td>
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<tr>
<td>Control</td>
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<tr>
<td>Role conflict</td>
</tr>
<tr>
<td>Opportunities to shorten the workday</td>
</tr>
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</table>
Investigating work conditions and burnout at three

<table>
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<th></th>
<th>Opportunities to work at a slower pace</th>
<th>Opportunities to get help from work colleagues</th>
<th>Role clarity</th>
<th>Control</th>
<th>Role clarity</th>
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<th>Opportunities to shorten the workday</th>
<th>Span of control</th>
<th>Control</th>
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<td></td>
<td>.071</td>
<td>.696</td>
<td>.772</td>
<td>.850</td>
<td>.946</td>
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<td>[.001                 ]</td>
<td>[.001]</td>
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<td>Role clarity</td>
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<tr>
<td>Total</td>
<td>$R^2 = 0.328$</td>
<td>$&lt; .001$</td>
<td></td>
<td></td>
<td></td>
<td>$R^2 = 0.478$</td>
<td>$&lt; .001$</td>
<td>$R^2 = 0.510$</td>
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