

The Danish Psychosocial Work Environment Questionnaire (DPQ): Development, content, reliability and validity ¹

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e-Appendix 1: Overview of dimensions and items in the Danish Psychosocial Work Environment Questionnaire (DPQ)

Domain: Demands at work

1.1 Quantitative demands

- 1 How often is it the case that you do not have time to complete all your work tasks? (from COPSOQ-II (1))
- 2 How often do you receive unscheduled work tasks that place you under time pressure? (from 'Work Environment and Health'-questionnaire (2))
- 3 How often do you have deadlines that are hard to meet? (from 'Work Environment and Health'-questionnaire (2))
- 4 Do you get behind with your work? (from COPSOQ-II (1))

Response options: "Always"; "Often"; "Sometimes"; "Rarely"; "Never/almost never"

1.2 Work pace

- 1 Is the pace of work so fast that it affects the quality of your work?
- 2 Do you have to work very fast? (from COPSOQ-II (1))

Response options: "Always"; "Often"; "Sometimes"; "Rarely"; "Never/almost never"

1.3 Emotional demands

- 1 Are you placed in emotionally demanding situations at work? (Adapted from COPSOQ-II (1))
- 2 As a result of your work, do you come into contact with people who oppose you or are aggressive towards you?
- 3 Do you have to deal with relationships at work that are emotionally challenging?
- 4 As a result of your work, do you have contact with people who are in difficult situations (e.g. people affected by a serious illness, accidents, grief, crises or social problems)?

Response options: "Always"; "Often"; "Sometimes"; "Rarely"; "Never/almost never"

1.4 Demands to conceal feelings

1. Do you have to be friendly and receptive towards everyone, regardless of how they treat you? (from COPSOQ-II (1))
2. Does your job require that you do not display your feelings? (from COPSOQ-II (1))

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

1.5 Cognitive demands

- 1 Does your work require your undivided attention? (Adapted from QPS-Nordic (3))
- 2 Do you have to process large amounts of information in your work? (Adapted from the Work Design Questionnaire (4))
- 3 Does your job require you to make complicated decisions? (Adapted from COPSOQ-II (1))
- 4 Do you have to pay attention to many things at once in your job? (from COPSOQ-II (1))

Response options for Q1-3: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent". Response options for Q4: "Always"; "Often"; "Sometimes"; "Rarely"; "Never/almost never"

1.6 Work without boundaries

1. How often are you 'on-call' to be available for work outside of your normal working hours? (from 'Work Environment and Health'-questionnaire (2))
2. How often do you work at home outside of your normal working hours, e.g. in the evening, during weekends or during holidays?
3. How often do you work on days when you are off from work, e.g. on weekends, holidays or vacations?
4. How often does your job require you to work overtime, i.e. beyond your agreed or expected working hours? (Adapted from 'Work Environment and Health'-questionnaire (2))

Response options: "Always"; "Often"; "Sometimes"; "Rarely"; "Never/almost never"

Domain: Work organization and job content

2.1 Influence at work

1. Do you have any influence on how you carry out your work tasks? (Adapted from 'Work Environment and Health'-questionnaire (2))
2. Do you have sufficient authority to deal with the responsibilities you have in your work? (from 'Work Environment and Health'-questionnaire (2))
3. Is it possible for you to make important decisions about your work?
4. Do you have any influence on the order in which you carry out your work tasks?

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

2.2 Influence on working hours

1. Do you have influence on your working hours, e.g. when you arrive at work or when you go home from work?
2. Do you have any influence on when you take breaks during the course of the working day?
3. Do you have any influence on when you take your vacation?

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

2.3 Possibilities for development

1. Does your work provide you with opportunities for developing your skills? (Adapted from COPSOQ-II (1))
2. Do your work tasks vary a lot?
3. Do you have possibilities to learn something new through your work? (from COPSOQ-II(1))
4. Do you have good opportunities for further training and education?

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

2.4 Role clarity

- 1 Are there clear goals for your work tasks? (from COPSOQ-II (1))
- 2 Do you know exactly what is expected of you at work? (from COPSOQ-II (1))
- 3 Do you know when you have carried out your job well?
- 4 Do you know exactly what your responsibilities are? (from COPSOQ-II (1))

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

2.5 Role conflicts

- 1 Do you have to do things in your work that you feel should be done differently? (Adapted from COPSOQ-II (1))
- 2 Are there any conflicting demands in your work? (from COPSOQ-II (1))
- 3 Does your job involve tasks that conflict with your personal values? (from QPS-Nordic (3))
- 4 Do you sometimes have to end a task even though you do not feel you have completed it?

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

2.6 Predictability

- 1 Do you receive timely information about e.g. important decisions, changes and plans for the future at your place of work? (from COPSOQ-II (1))
- 2 Are you informed well in advance if changes are made to your work tasks?
- 3 Are you informed well in advance of changes to whom you will be working with?
- 4 Are you informed well in advance if there are changes to your working hours?

Response options for Q1: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent". Response options for Q2-4: "Always"; "Often"; "Sometimes"; "Rarely"; "Never/almost never"

2.7 Possibilities for performing work tasks

- 1 Do your working conditions allow you to carry out your work satisfactorily?
- 2 Do you have the tools you need (e.g. technical assistive devices, tools, machinery, IT solutions, etc.) for you to do your job satisfactorily?
- 3 Are there enough employees at work for you to do your job satisfactorily?
- 4 Can you perform your work tasks to a level of quality that you are satisfied with? (from (5))

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

2.8 Unnecessary work tasks

- 1 Do you spend time on work tasks that you have difficulty seeing the purpose with?
- 2 Are you placed in situations at work that are unnecessarily difficult to deal with?
- 3 Is your work made more difficult than necessary due to poor work procedures? (adapted from Danish National Working Environment Survey (DANES) (6))
- 4 Do you have to do work tasks that you think are unnecessary?

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

Domain: Interpersonal relations: cooperation and leadership

3.1 Social support from colleagues

- 1 Can you get practical help with your work from colleagues if you need it? (Adapted from QPS-Nordic (3))
- 2 Can you get advice and guidance from your colleagues if you need it?
- 3 Can you talk to your colleagues about it if you experience difficulties at work?
- 4 Are you and your colleagues attentive to each other's wellbeing?

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

3.2 Cooperation between colleagues within teams, departments, or groups

- 1 Do you and your colleagues help each other if someone has too much to do? (Adapted from Workplace Social Capital Questionnaire (7))
- 2 Is there a sense of community and cohesion between you and your colleagues? (Adapted from Workplace Social Capital Questionnaire (7))
- 3 Do you and your colleagues work well together when problems emerge which require cooperation among you? (Adapted from Workplace Social Capital Questionnaire (7))
- 4 Do you and your colleagues agree on what is most important in your work tasks? (Adapted from Workplace Social Capital Questionnaire (7))

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

3.3 Trust between colleagues

- 1 Do you trust the ability of your colleagues to do their job well? (Adapted from Workplace Social Capital Questionnaire (7))
- 2 Can you express your views and feelings to your closest colleagues?
- 3 In general, do you and your colleagues trust one another? (Adapted from COPSOQ-II (1))
- 4 Do you and your colleagues keep each other informed about things that are important for you to do your job well?

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

3.4 Social support from management

- 1 Can you get practical help with your work from your immediate supervisor if you need it? (Adapted from QPS-Nordic (3))
- 2 Can you talk with your immediate supervisor about difficulties you experience at work?
- 3 Does your immediate supervisor follow up on conversations about any difficulties you have experienced at work?
- 4 Can you get advice and guidance from your immediate supervisor if you need it?

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

3.5 Quality of leadership

- 1 Does your immediate supervisor give high priority to the wellbeing of employees in the workplace? (Adapted from COPSOQ-II (1))
- 2 Is your immediate supervisor good at communicating clear goals for the work of you and your colleagues?
- 3 Is your immediate supervisor good at resolving conflicts? (Adapted from COPSOQ-II (1))
- 4 Is your immediate supervisor good at motivating the employees?

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

3.6 Cooperation with immediate supervisor

- 1 Is the relationship between your immediate supervisor and you and your co-workers characterized by mutual respect and recognition? (Adapted from Workplace Social Capital Questionnaire (7))
- 2 Does your immediate supervisor have a clear understanding of the work tasks that you and your co-workers perform? (Adapted from Workplace Social Capital Questionnaire (7))
- 3 Does your immediate supervisor take the needs and views of you and your co-workers into consideration when making decisions? (Adapted from Workplace Social Capital Questionnaire (7))
- 4 Does your immediate supervisor contribute to solving everyday problems? (Adapted from Workplace Social Capital Questionnaire (7))

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

3.7 Justice in the workplace

1. Are conflicts resolved in a fair way? (from COPSOQ-II (1))
2. Can one get a clear reason when important decisions are made in your workplace?
3. Does the management at your workplace respect you? (from COPSOQ-II (1))
4. Does the management at your workplace treat you fairly? (Adapted from COPSOQ-II (1))

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

3.8 Involvement of employees

- 1 Does the management encourage you and your colleagues to come up with ideas for improvements?
- 2 Do employees and managers work well together to improve work procedures?
- 3 Are suggestions for improvements treated seriously by the management in the workplace?

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

3.9 Changes in the workplace

Filter question:

1. Have any major changes been implemented at your workplace during the last two years (e.g. a restructuring of the workplace or layoffs)?

Response options: "Yes, several times"; "Yes, one time"; "No"

If Yes, the following questions should be asked:

1. Did the management inform the employees sufficiently about the changes in the workplace?
2. Have the employees been sufficiently involved in relation to the changes?
3. Are you generally satisfied with the way the management dealt with the changes?
4. Do you understand the management's reasons for implementing the changes?

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

3.10 Recognition

1. Are your efforts recognized and appreciated at your place of work? (Adapted from COPSOQ-II (1))

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

Domain: Conflicts in the workplace

4.1 Threats

1. Have you been exposed to work-related threats during the last 12 months? (Adapted from COPSOQ-II (1))

('Threats' denotes verbal or written threats or threatening behaviour)

Response options: "Yes, daily or almost daily"; "Yes, weekly"; "Yes, monthly"; "Yes, occasionally"; "No"

2. If yes, who were you threatened by?

Response options: "Overall management/Business owner"; "Immediate supervisor"; "Colleagues"; "Subordinates"; "Customers, clients, patients, pupils, relatives (with 'relatives' we think of relatives to pupils, clients or patients)"; "The threat has/threats have been put forward anonymously"

4.2 Violence

1. Have you been exposed to work-related physical violence during the last 12 months?? (Adapted from COPSOQ-II (1))

Response options: "Yes, daily or almost daily"; "Yes, weekly"; "Yes, monthly"; "Yes, occasionally"; "No"

2. If yes, who was violent towards you?

Response options: "Overall management/Business owner"; "Immediate supervisor"; "Colleagues"; "Subordinates"; "Customers, clients, patients, pupils, relatives (with 'relatives' we think of relatives to pupils, clients or patients)"; "The threat has/threats have been put forward anonymously"

4.3 Bullying

1. Have you been exposed to bullying in your current job during the last 12 months?
(*Bullying takes place when a person repeatedly and over an extended period of time is exposed to unpleasant or degrading treatment. For bullying to take place the person who is bullied must find it difficult to defend him- or herself.*) (Adapted from COPSOQ-II (1))

Response options: "Yes, daily or almost daily"; "Yes, weekly"; "Yes, monthly"; "Yes, occasionally"; "No"

2. If yes, who were you bullied by?

Response options: "Overall management/Business owner"; "Immediate supervisor"; "Colleagues"; "Subordinates"; "Customers, clients, patients, pupils, relatives (with 'relatives' we think of relatives to pupils, clients or patients)"

4.4 Sexual harassment

1. Have you been exposed to sexual harassment in your workplace during the last 12 months? (Adapted from COPSOQ-II (1))

Response options: "Yes, daily or almost daily"; "Yes, weekly"; "Yes, monthly"; "Yes, occasionally"; "No"

2. If yes, who were you sexually harassed by?

Response options: "Overall management/Business owner"; "Immediate supervisor"; "Colleagues"; "Subordinates"; "Customers, clients, patients, pupils, relatives (with 'relatives' we think of relatives to pupils, clients or patients)"

4.5 Discrimination

1. Have you within the last 12 months experienced discrimination or been treated poorly due to e.g. your sex, age, ethnicity, religion, health or sexual orientation?

Response options: "Yes, daily or almost daily"; "Yes, weekly"; "Yes, monthly"; "Yes, occasionally"; "No"

2. If yes, who discriminated or treated you poorly?

Response options: "Overall management/Business owner"; "Immediate supervisor"; "Colleagues"; "Subordinates"; "Customers, clients, patients, pupils, relatives (with 'relatives' we think of relatives to pupils, clients or patients)"

4.6 Harassment

1. Have you within the last 12 months experienced work-related harassment by customers, clients, patients, pupils or relatives?

(*Harassment occurs when a person is exposed to offensive acts, threats or persecution from persons that one is in contact with through one's job, e.g. customers, clients, patients, pupils or their relatives, but not colleagues, superiors or subordinates*)

Response options: "Yes, daily or almost daily"; "Yes, weekly"; "Yes, monthly"; "Yes, occasionally"; "No"

2. If yes, how/where did the harassment occur?

Response options: "At my workplace"; "Outside of my workplace, e.g. at home or in town"; "Via social media"; "By telephone, SMS, email or letter"; "Other"

Domain: Reactions to the work situation

5.1 Experience of meaning at work

1. Do you feel motivated and engaged in your work? (from COPSOQ-II (1))
2. Are your work tasks meaningful? (from COPSOQ-II (1))
3. Do you think that your work tasks are interesting and inspiring? (from 'Work Environment and Health'-questionnaire (2))
4. Does your work give you self-confidence and job satisfaction? (from 'Work Environment and Health'-questionnaire (2))

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

5.2 Commitment to the workplace

1. Would you recommend others to apply for a job at your workplace? (Adapted from COPSOQ-II (1))
2. Do you tell your friends that your workplace is a good place to work?
3. Are you proud of working at your workplace?
4. Does your workplace inspire you to do your best? (Adapted from QPS-Nordic (3))

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

5.3 Work engagement (all items are from the Utrecht Work Engagement Scale (UWES) (8))

1. At my work, I feel bursting with energy
2. I am enthusiastic about my job
3. I feel happy when I am working intensely
4. At my job, I feel strong and vigorous
5. I am proud of the work that I do
6. I am immersed in my work
7. When I get up in the morning, I feel like going to work
8. My job inspires me
9. I get carried away when I am working

Response options: "Never"; "Almost never"; "Rarely"; "Sometimes"; "Often"; "Very often"; "Always"

5.4 Job insecurity

1. Do you worry about becoming unemployed? (from COPSOQ-II (1))
2. Do you worry that it could be difficult to find another job if you become unemployed? (from COPSOQ-II (1))
3. Do you worry about being transferred to another job against your will? (from COPSOQ-II (1))

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

5.5 Self-reported stress

1. How often have you felt stressed within that last two weeks? (from 'Work Environment and Health'-questionnaire (2))

Response options: "All the time"; "Often"; "Sometimes"; "Rarely"; "Never"

If "All the time", "Often", "Sometimes", or "Rarely", the following questions should be asked:

2. What was the most significant source of your stress?

Response options: "Work"; "Private life"; "Both work and private life"

5.6 Job satisfaction

1. Overall, how satisfied are you with your job? (Adapted from COPSOQ-II (1))

Response options: A scale from 0 to 10, where 0 denotes the lowest possible level of job satisfaction and 10 denotes the highest possible level of job satisfaction.

5.7 Overall assessment of the psychosocial work environment

1. Overall, how satisfied are you with the social and organizational work environment in your workplace?

Response options: A scale from 0 to 10, where 0 denotes the lowest possible assessment of the psychosocial work environment and 10 denotes the highest possible assessment of the psychosocial work environment.

5.8 Conflict between work-life and private life

1. Does your job demand so much of your energy that it has a negative effect on your private life? (Adapted from COPSOQ-II (1))
2. Does your job demand so much of your time that it has a negative effect on your private life? (Adapted from COPSOQ-II (1))
3. Does your job demand so much of your attention that it has a negative effect on your private life?

Response options: "To a very large extent"; "To a large extent"; "Somewhat"; "To a small extent"; "To a very small extent"

Coding of items and multi-item scales

With the exception of the six dimensions measured within the domain *Conflicts in the workplace*, all dimensions (scales and single items) were measured by scales ranging from 0 to 100. Scale scores were calculated by recoding item scores from 0 to 100 and averaging the scores for items within each scale. For each scale, the score of 100 indicates the highest level of the measured dimension.

Response options for items with five-point Likert scales were scored as follows:

Response option	Score
To a very large extent // Always	100
To a large extent // Often	75
Somewhat // Sometimes	50
To a small extent // Rarely	25
To a very small extent // Never/almost never	0

Response options for items in the scale 'Work engagement' were scored as follows:

Response option	Score
Never	0.0
Almost never	16.7
Rarely	33.3
Sometimes	50.0
Often	66.7
Very often	83.3
Always	100.0

Response options for the two dimensions *Job satisfaction* and *Overall assessment of the psychosocial work environment* were scored on a scale from 0 to 10. To align scores on these two dimensions with a scale ranging from 0 to 100, responses on the original response scale were multiplied with 10.

In multi-item scales we added the score for the chosen response option for each item and divided the sum score with the number of items in the multi-item scale. In cases where respondents had only responded to some of the items making up a given scale, scales values were calculated if the respondent had responded to half of the items or more.

References

- (1) Pejtersen JH, Kristensen TS, Borg V, Bjorner JB. The second version of the Copenhagen Psychosocial Questionnaire. *Scand J Public Health* 2010; 38:8-24.
- (2) Arbejdsmiljø og helbred i Danmark 2012. Resumé og resultater [Working environment and health in Denmark 2012. Resume and results]. Copenhagen: Det Nationale Forskningscenter for Arbejdsmiljø [The National Research Centre for the Working Environment]; 2013.
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- (8) Schaufeli W, Bakker A, Salanova M. The measurement of work engagement with a short questionnaire. A cross-national study. *Educ Psychol Meas* 2006; 66(4):701-716.

e-Appendix 2: Translation of the Danish Psychosocial Work Environment Questionnaire (DPQ)

The DPQ was translated from Danish into English using the following procedure. First, the items and names of the individual dimensions were translated from Danish into English by a native Danish speaking member of the research team. This translation was successively commented on by two native English speaking researchers who also master the Danish language. Finally, the revised English translation of the DPQ was used in five qualitative interviews with five employed individuals from the UK, to test the applicability of the questions in a work-life context among native English speakers. The results from these interviews were used to finalize the translation of the DPQ from Danish into English. All members of the Danish research team read and discussed the final translation of the DPQ into English. As all members of the research team were fluent English speakers, it was deemed that a formal back-translation of the DPQ was not necessary.

Accordingly, the English version of the DPQ presented in e-Appendix 1 represents the final English version of the DPQ that is suitable for research in English-speaking study populations, and for further translations from English into other languages.

e-Appendix 3: List of 20 international scientific journals that were scanned to identify relevant scales and items for the Danish Psychosocial Work Environment Questionnaire (DPQ)

- American Journal of Epidemiology
- American Journal of Industrial Medicine
- Human Relations
- International Archives of Occupational and Environmental Health
- International Journal of Nursing Studies
- Journal of Advanced Nursing
- Journal of Applied Psychology
- Journal of Epidemiology and Community Health
- Journal of Nursing Management
- Journal of Occupational and Environmental Medicine
- Journal of Occupational and Organizational Psychology
- Journal of Occupational Health
- Journal of Occupational Health Psychology
- Journal of Organizational Behavior
- Journal of Vocational Behavior
- Occupational and Environmental Medicine
- Scandinavian Journal of Public Health
- Scandinavian Journal of Work, Environment and Health
- Work – A Journal of Prevention, Assessment and Rehabilitation
- Work & Stress

e-Appendix 4: List of relevant psychosocial work environment questionnaires that were scanned to identify relevant scales and items for the Danish Psychosocial Work Environment Questionnaire (DPQ)

1. COPSOQ-II (1)
2. Work Environment and Health (2)
3. Danish National Work Environment Survey (DANES) (3)
4. QPS-Nordic (4)
5. Effort-Reward imbalance questionnaire (5)
6. Job Content Questionnaire (6)
7. Organizational justice (7)
8. Workplace social capital (8)
9. Workplace social capital (9)
10. Illegitimate job tasks (10)
11. NIOSH Health Hazard Evaluation (11)
12. Quantitative Workload Inventory, QWI (12)
13. Questionnaire on the experience and assessment of work (QEEW) (13)
14. Role Overload Scale Items (14)
15. Short Inventory Psychological Hazards (SIMPH) (15)
16. Work overload scale (16)
17. Short Questionnaire for Job Analysis (17)
18. Work Design Questionnaire (18)
19. Emotional Labor Strategy Items (19)
20. Employee Emotional Display Behaviors (20)
21. Frankfurt Emotion Work Scales (21)
22. Emotion Work Requirements Scale (22)
23. Emotional Labor Scale (23)
24. Empowerment Role Identity (24)
25. Job Diagnostic Survey (25)
26. Job Characteristics Inventory (26)
27. Psychological empowerment (27)
28. Quality of Worklife (QWL) (28)
29. NIOSH generic job stress questionnaire (29)

30. Understanding of Events, Predictability of Events, and Control Over One's Work Environment (30)
31. Job Crafting Scale (31)
32. Refining Lodahl and Kejner's Job Involvement Scale (32)
33. Measurement of some work attitudes (33)
34. Organizational Commitment Scale (34)
35. Supervisory and Organizational commitment (35)
36. Reciprocation of perceived organizational support (36)
37. Job Ambiguity Items (37)
38. Empowerment Leadership Questionnaire (ELQ) items (38)
39. Empowering Leadership (39)
40. Item Content for Leader-Member Exchange (LMX-7 and SLMX-7) (40)
41. Leadership behavior (41)
42. Measure of LMX (LMX 7) (42)
43. Psychological Contract Breach (43)
44. Job satisfaction survey (44)
45. Intragroup Trust, Tactics, and Conflict Items (45)
46. Distributive, interactional, and informational justice (46)
47. Interactional Justice (47)
48. Diversity Perception Scale (48)
49. Utrecht Work Engagement Scale (UWES) (49;50)
50. Primary Task Quality (51)

References

- (1) Pejtersen JH, Kristensen TS, Borg V, Bjorner JB. The second version of Copenhagen Psychosocial Questionnaire (COPSOQII). *Scand J Public Health* 2010; 38(suppl 3):8-24.
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e-Appendix 5: List of occupational sectors that were covered in the focus group interviews conducted during phase 1 of the development process

- Work in Building and Construction (Interview with researcher who conducted field studies at building sites)
- Work in Trade, Finance and Office (Employees in a super market)
- Work in Trade, Finance and Office (Employees in a bank)
- Work in Trade, Finance and Office (Employees in a Book store)
- Work in Industry (Employees in a factory in the graphical industry)
- Transport, Tourism, Service and Agricultural production (Employees in a hotel)
- Transport, Tourism, Service and Agricultural production (Employees in a bus drivers)
- Transport, Tourism, Service and Agricultural production (Employees in a gardening department in a municipality)
- Transport, Tourism, Service and Agricultural production (Employees in a slaughter house)
- Transport, Tourism, Service and Agricultural production (Employees in a postal service)
- Welfare and Public administration (Employees in an institution for professional education: education of teachers)
- Welfare and Public administration (Employees in an institution for professional education: education of nurses)
- Welfare and Public administration (Employees in a primary school: teachers)
- Welfare and Public administration (Employees in a police department)
- Welfare and Public administration (Employees in a psychiatric hospital)
- Welfare and Public administration (Employees in a department in the municipal administration)

Procedure

Participating workplaces were recruited through sector-specific work environment councils.

Once the contact between the research team and the workplace had been established, the contact person at the workplace was asked to recruit a number of informants to participate in the interview. In the interviews the number of informants varied between one and five persons. Four interviews were conducted with one informant and the remaining 12 interviews

were conducted as focus group interviews. In the 16 workplaces employees volunteered to participate in the interviews, which implies that the research team had no influence on the selection of participants. Two members of the research team were present at all interviews.

This data collection was performed through semi-structured interviews on the basis of an interview guide. The interview guide prompted the informants using the following questions:

Introductory question:

- What is a 'good' psychosocial work environment for you? And what is a 'bad' psychosocial work environment for you?

Follow-up questions:

- You mentioned that [e.g. cooperation with colleagues] is important for you in your work. Why is that important? Can you provide some examples?
 - Other follow-up questions could be: Relations to supervisors, Conflicts in the workplace, Influence at work, Job demands, Work stress, Job insecurity, Conflicts between work and private life etc.
- Tell us about a positive experience from your work life?
- Tell us about a negative experience from your work life?

Analysis

We undertook a pragmatic content analysis of the interview. The overall aim of the analyses was to identify patterns of responses and reflections that allowed us to assess the relevance of themes in the COPSOQ-II, to identify emerging issues and to get an impression of how employees in different occupational sectors articulated their psychosocial work environment.

e-Appendix 6: Analysis of non-response in the 14 job groups by sex and age

Table 1: Analysis of non-response by sex. Percent.

Job group	Sex	Respon- dents	Non-res- pondents	p-value
Office workers	M	41.1	58.9	0.0063
	F	54.9	45.1	
Technical draughtsmen	M	58.6	41.4	0.1977
	F	64.0	36.0	
Teaching and research in Universities	M	45.2	54.8	0.0079
	F	56.3	43.7	
Health care helpers	M	30.6	69.4	0.0474
	F	45.3	54.7	
Primary school teachers	M	50.0	50.0	0.0122
	F	61.1	38.9	
Medical doctors	M	54.9	45.1	0.8486
	F	54.0	46.0	
Mail carriers	M	48.7	51.3	0.0727
	F	56.9	43.1	
Slaughterhouse workers	M	34.5	65.6	0.1823
	F	40.5	59.5	
Smith workers	M	40.1	59.9	0.7930
	F	44.4	55.6	
Engineers (Construction)	M	57.0	43.0	0.7532
	F	59.5	41.5	
Sales assistants in shops	M	31.5	68.5	0.0238
	F	38.8	61.2	
Private bankers	M	37.0	63.0	<0.0001
	F	54.6	45.5	
Business managers	M	54.4	45.7	0.5408
	F	56.9	43.1	
Police officers	M	51.2	48.9	0.6122
	F	54.1	45.9	

Table 2: Analysis of non-response by age groups

Job group	Respon- ded	18-24	25-34	35-44	45-54	>55	p-value
Office workers	Yes	32.6	38.8	42.4	59.3	72.7	<0.0001
	No	67.4	61.2	57.6	40.7	27.3	
Technical draughtsmen	Yes	14.3	43.7	58.2	63.4	74.8	<0.0001
	No	85.7	56.3	41.8	36.6	25.2	
Teaching and re- search in Universities	Yes	30.8	43.4	48.7	54.0	63.9	0.0050
	No	69.2	56.6	51.3	46.0	36.1	
Health care helpers	Yes	26.6	21.7	33.3	51.1	61.4	<0.0001
	No	73.4	78.3	66.7	48.9	38.6	
Primary school teachers	Yes	25.9	37.5	55.2	65.7	75.6	<0.0001
	No	74.1	62.5	44.8	34.3	24.4	
Medical doctors*	Yes		50.8	44.9	62.0	66.0	<0.0023
	No		49.2	55.1	38.0	34.0	
Mail carriers	Yes	28.8	40.5	44.2	58.0	67.2	<0.0001
	No	71.2	59.5	55.8	42.0	32.8	
Slaughterhouse workers	Yes	7.0	16.3	27.9	45.1	57.8	<0.0001
	No	93.0	83.8	72.1	54.9	42.2	
Smith workers	Yes	27.8	19.8	38.4	45.8	57.8	<0.0001
	No	72.2	80.2	61.6	54.2	42.2	
Engineers (Construction)	Yes	33.3	43.6	53.2	63.5	72.7	<0.0001
	No	66.7	56.4	46.8	36.5	27.3	
Sales assistants in shops	Yes	28.9	32.4	40.8	49.5	64.4	<0.0001
	No	71.1	67.6	59.2	50.5	35.6	
Private bankers	Yes	33.3	36.2	43.2	57.1	74.2	<0.0001
	No	66.7	63.8	56.8	43.0	25.8	
Business managers	Yes	0.0	25.0	48.7	55.2	68.4	<0.0001
	No	100.0	75.0	51.4	44.8	31.6	
Police officers	Yes	0.0	34.3	44.6	61.2	65.6	<0.0001
	No	100.0	65.7	55.4	38.9	34.4	

* Due to a low number of observations in the youngest age groups, the age groups 18-24 and 25-34 were collapsed for the job group 'Medical doctors'.

e-Appendix 7: Assessment of internal consistency reliability: Job group-specific Cronbach’s alpha values for 26 multi-item scales with three or more items

Domain: Demands at work

Table 1: Internal consistency reliabilities (Cronbach’s alpha) for multi-item scales

Job group	Quantitative demands (4 items)	Emotional demands (4 items)	Cognitive demands (4 items)	Work without boundaries (4 items)
1. Office workers	0.84	0.81	0.76	0.84
2. Technical draughtsmen	0.83	0.72	0.79	0.85
3. Teaching and research staff in universities	0.80	0.83	0.70	0.86
4. Health care helpers	0.85	0.75	0.69	0.65
5. Primary school teachers	0.88	0.83	0.74	0.83
6. Medical doctors	0.82	0.80	0.71	0.83
7. Mail carriers	0.81	0.80	0.71	0.56
8. Slaughterhouse workers	0.74	0.75	0.76	0.70
9. Smith workers	0.81	0.75	0.77	0.75
10. Engineers (construction)	0.78	0.72	0.73	0.83
11. Sales assistants in shops	0.87	0.78	0.76	0.76
12. Private bankers	0.89	0.81	0.71	0.75
13. Business managers	0.80	0.77	0.76	0.85
14. Police officers	0.82	0.83	0.74	0.66

Domain: Work organization and job content

Table 2: Internal consistency reliabilities (Cronbach's alpha) for multi-item scales

Job group	Influence at work (4 items)	Influence on working hours (3 items)	Possibilities for development (4 items)	Role clarity (4 items)	Role conflicts (4 items)	Predictability (4 items)	Possibilities for performing work tasks (4 items)	Unnecessary work tasks (4 items)
1. Office workers	0.86	0.77	0.80	0.82	0.76	0.75	0.82	0.81
2. Technical draughtsmen	0.83	0.75	0.80	0.82	0.80	0.78	0.79	0.81
3. Teaching and research staff in universities	0.83	0.86	0.74	0.84	0.72	0.82	0.76	0.82
4. Health care helpers	0.86	0.68	0.81	0.84	0.78	0.69	0.80	0.70
5. Primary school teachers	0.82	0.68	0.77	0.80	0.84	0.82	0.82	0.85
6. Medical doctors	0.81	0.73	0.81	0.80	0.75	0.76	0.82	0.80
7. Mail carriers	0.86	0.57	0.82	0.78	0.78	0.77	0.84	0.80
8. Slaughterhouse workers	0.90	0.77	0.79	0.73	0.77	0.80	0.82	0.80
9. Smith workers	0.88	0.65	0.81	0.76	0.77	0.83	0.83	0.81
10. Engineers (construction)	0.83	0.81	0.76	0.81	0.73	0.80	0.78	0.81
11. Sales assistants in shops	0.83	0.72	0.83	0.82	0.78	0.82	0.83	0.81
12. Private bankers	0.81	0.75	0.81	0.84	0.75	0.80	0.77	0.79
13. Business managers	0.85	0.84	0.82	0.86	0.78	0.78	0.75	0.82
14. Police officers	0.79	0.78	0.78	0.81	0.77	0.77	0.81	0.84

Domain: Interpersonal relations: cooperation and leadership

Table 3: Internal consistency reliabilities (Cronbach's alpha) for multi-item scales

Job group	Social support from colleagues (4 items)	Cooperation between colleagues within teams, departments or groups (4 items)	Trust between colleagues (4 items)	Social support from management (4 items)	Quality of leadership (4 items)	Cooperation with immediate supervisor (4 items)	Justice in the workplace (4 items)	Involvement of employees (3 items)	Changes in the workplace (4 items)
1. Office workers	0.83	0.84	0.83	0.91	0.93	0.89	0.87	0.89	0.88
2. Technical draughtsmen	0.82	0.81	0.82	0.88	0.89	0.88	0.84	0.88	0.88
3. Teaching and research staff in universities	0.83	0.85	0.80	0.90	0.90	0.88	0.86	0.88	0.87
4. Health care helpers	0.83	0.86	0.84	0.92	0.94	0.91	0.84	0.92	0.84
5. Primary school teachers	0.84	0.73	0.79	0.90	0.88	0.88	0.85	0.89	0.81
6. Medical doctors	0.77	0.75	0.76	0.88	0.88	0.87	0.80	0.89	0.83
7. Mail carriers	0.83	0.85	0.78	0.93	0.93	0.89	0.87	0.88	0.83
8. Slaughterhouse workers	0.83	0.81	0.82	0.90	0.92	0.90	0.85	0.88	0.81
9. Smith workers	0.83	0.83	0.83	0.89	0.93	0.90	0.83	0.90	0.90
10. Engineers (construction)	0.77	0.78	0.76	0.85	0.87	0.81	0.78	0.87	0.86
11. Sales assistants in shops	0.86	0.87	0.84	0.90	0.92	0.90	0.89	0.91	0.83
12. Private bankers	0.82	0.79	0.78	0.88	0.88	0.89	0.85	0.90	0.85
13. Business managers	0.79	0.81	0.80	0.88	0.88	0.86	0.86	0.89	0.87
14. Police officers	0.81	0.78	0.79	0.89	0.91	0.88	0.83	0.89	0.84

Domain: Reactions to the work situation

Table 4: Internal consistency reliabilities (Cronbach's alpha) for multi-item scales

Job group	Experience of meaning at work (4 items)	Commitment to the workplace (4 items)	Work engagement (9 items)	Job insecurity (3 items)	Conflict between work-life and private life (3 items)
1. Office workers	0.90	0.92	0.95	0.78	0.89
2. Technical draughtsmen	0.87	0.92	0.95	0.76	0.90
3. Teaching and research staff in universities	0.90	0.90	0.96	0.81	0.91
4. Health care helpers	0.87	0.92	0.95	0.81	0.91
5. Primary school teachers	0.83	0.92	0.95	0.79	0.90
6. Medical doctors	0.87	0.91	0.94	0.81	0.86
7. Mail carriers	0.89	0.89	0.94	0.79	0.86
8. Slaughterhouse workers	0.90	0.92	0.94	0.78	0.87
9. Smith workers	0.90	0.92	0.94	0.79	0.86
10. Engineers (construction)	0.89	0.91	0.95	0.78	0.89
11. Sales assistants in shops	0.91	0.95	0.95	0.73	0.91
12. Private bankers	0.89	0.92	0.95	0.84	0.90
13. Business managers	0.91	0.92	0.96	0.77	0.91
14. Police officers	0.88	0.89	0.93	0.55	0.85

e-Appendix 8: Assessment of construct validity: Job group-specific means on 32 measures of psychosocial working conditions (4 single items and 28 multi-item scales with two or more items).

Domain: Demands at work

Table 1: Quantitative demands (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N (mis- sing)
Teaching and research staff in universities	55.1	18.8	0.0	1.5	268 (26)
Medical doctors	54.8	18.4	0.4	1.2	259 (8)
Engineers (Construction)	54.7	15.5	0.3	0.0	336 (14)
Primary school teachers	54.4	19.9	0.0	1.0	307 (14)
Business managers	52.9	16.6	0.0	0.0	313 (19)
Private bankers	52.5	21.3	2.2	1.1	358 (20)
Technical draughtsmen	51.2	17.9	0.3	0.6	314 (16)
Police officers	50.6	18.1	1.3	0.3	299 (13)
Office workers	48.4	19.3	0.7	0.4	288 (20)
Health care helpers	48.2	18.9	1.4	0.5	217 (31)
Smith workers	45.2	19.4	2.1	0.4	240 (20)
Mail carriers	43.2	19.4	1.5	0.8	260 (27)
Sales assistants in shops	42.5	21.9	3.4	0.8	267 (56)
Slaughterhouse workers	36.6	19.7	3.9	0.7	306 (24)
Difference between highest and lowest scale value	18.5				

Table 2: Work pace (2 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Slaughterhouse workers	77.6	26.3	1.0	17.4	305	(25)
Private bankers	67.9	18.9	0.3	3.1	357	(21)
Medical doctors	64.7	21.8	0.8	2.7	258	(9)
Mail carriers	63.6	24.4	1.0	2.9	260	(27)
Business managers	62.3	19.0	1.2	2.3	313	(19)
Sales assistants in shops	61.2	22.9	2.8	1.4	267	(56)
Technical draughtsmen	60.4	18.3	0.0	1.3	314	(16)
Health care helpers	60.3	23.0	0.3	0.6	217	(31)
Office workers	58.8	19.9	0.3	1.0	288	(20)
Primary school teachers	58.6	21.4	1.1	3.4	306	(15)
Engineers (Construction)	58.3	18.6	1.7	0.7	336	(14)
Police officers	55.4	20.3	0.0	2.4	299	(13)
Teaching and research staff in universities	54.3	22.2	2.2	1.1	268	(26)
Smith workers	53.1	21.7	1.7	1.3	240	(20)
Difference between highest and lowest scale value	24.5					

Table 3: Emotional demands (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Primary school teachers	60.1	19.5	0.3	4.9	307	(14)
Health care helpers	59.9	17.8	0.5	1.8	217	(31)
Police officers	57.5	20.1	1.3	1.7	299	(13)
Medical doctors	57.3	20.2	1.5	1.5	259	(8)
Business managers	38.3	19.5	2.9	0.0	312	(20)
Private bankers	38.1	19.7	3.9	0.3	358	(20)
Office workers	35.6	22.1	5.2	0.7	287	(21)
Teaching and research staff in universities	33.0	21.5	8.2	0.8	268	(26)
Slaughterhouse workers	31.4	19.8	6.6	0.3	304	(26)
Sales assistants in shops	30.4	20.2	7.5	0.0	267	(56)
Engineers (Construction)	28.3	16.1	5.4	0.0	336	(14)
Mail carriers	27.8	20.1	7.0	0.4	258	(29)
Smith workers	26.3	18.5	10.5	0.0	239	(21)
Technical draughtsmen	25.5	17.1	9.6	0.0	314	(16)
Difference between highest and lowest scale value	34.6					

Table 4: Demands to conceal feelings (2 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Sales assistants in shops	67.4	24.4	2.2	18.3	273	(50)
Health care helpers	66.0	21.8	0.0	14.3	217	(31)
Primary school teachers	64.6	22.8	1.3	12.5	303	(18)
Medical doctors	63.9	22.5	1.6	11.3	257	(10)
Police officers	62.4	23.3	1.0	11.0	300	(12)
Private bankers	58.8	23.6	3.6	7.5	360	(18)
Mail carriers	56.6	23.9	3.5	6.2	259	(28)
Office workers	52.2	24.4	3.8	5.6	288	(20)
Business managers	51.1	22.8	4.5	1.9	313	(19)
Teaching and research staff in universities	46.2	25.3	6.5	4.6	262	(32)
Smith workers	44.0	24.8	7.3	2.1	234	(26)
Technical draughtsmen	42.8	23.0	4.8	2.9	316	(14)
Engineers (Construction)	42.8	20.5	4.7	0.9	339	(11)
Slaughterhouse workers	42.1	25.7	11.4	4.4	299	(31)
Difference between highest and lowest scale value	25.3					

Table 5: Cognitive demands (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Medical doctors	87.7	12.1	0.0	29.2	260	(7)
Business managers	81.7	13.7	0.0	16.7	317	(15)
Teaching and research staff in universities	81.3	15.2	0.0	16.6	271	(23)
Primary school teachers	79.5	14.6	0.0	11.4	307	(14)
Engineers (Construction)	75.7	13.8	0.0	6.1	346	(4)
Health care helpers	72.7	15.7	0.0	9.6	219	(29)
Police officers	70.4	15.3	0.0	3.0	301	(11)
Private bankers	70.1	15.7	0.0	2.5	366	(12)
Technical draughtsmen	66.0	16.5	0.0	2.5	320	(10)
Office workers	65.5	16.7	0.0	3.7	294	(14)
Smith workers	60.7	18.2	0.0	3.7	246	(14)
Sales assistants in shops	59.0	18.9	0.4	2.8	284	(39)
Mail carriers	52.8	18.0	0.0	1.5	264	(23)
Slaughterhouse workers	51.1	22.5	0.6	2.2	313	(17)
Difference between highest and lowest scale value	36.6					

Table 6: Work without boundaries (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Teaching and research staff in universities	62.8	22.2	1.1	4.9	268	(26)
Business managers	61.4	20.7	1.3	2.2	313	(19)
Medical doctors	52.4	21.5	1.2	1.2	259	(8)
Engineers (Construction)	50.1	19.8	1.5	0.9	336	(14)
Primary school teachers	41.3	23.1	5.2	0.3	306	(15)
Police officers	41.1	18.6	2.0	2.4	298	(14)
Smith workers	37.4	20.4	5.0	0.4	240	(20)
Sales assistants in shops	36.7	21.7	3.4	0.4	267	(56)
Technical draughtsmen	32.5	21.9	6.4	0.3	313	(17)
Health care helpers	30.8	17.8	3.7	3.2	217	(31)
Slaughterhouse workers	30.7	19.6	5.9	1.0	303	(27)
Office workers	29.8	22.3	8.9	0.4	288	(20)
Mail carriers	29.7	16.3	2.7	0.8	259	(28)
Private bankers	25.6	18.8	7.6	0.3	357	(21)
Difference between highest and lowest scale value	37.2					

Domain: Work organization and job content

Table 7: Influence at work (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Business managers	78.0	16.2	0.0	17.7	317	(15)
Teaching and research staff in universities	77.2	17.6	0.0	17.3	271	(23)
Engineers (Construction)	74.3	15.7	0.0	10.1	346	(4)
Medical doctors	67.9	18.6	0.0	8.1	261	(6)
Smith workers	66.0	20.9	0.8	9.8	246	(14)
Office workers	65.9	19.4	0.3	4.1	294	(14)
Health care helpers	65.3	18.9	0.0	9.1	219	(29)
Sales assistants in shops	63.8	21.0	0.4	6.7	284	(39)
Technical draughtsmen	63.2	18.6	0.3	2.8	320	(10)
Private bankers	62.2	17.6	0.3	2.5	365	(13)
Police officers	61.3	17.9	0.3	3.3	301	(11)
Primary school teachers	60.6	18.3	0.0	2.0	307	(14)
Mail carriers	49.0	22.4	1.2	3.8	262	(25)
Slaughterhouse workers	44.5	27.0	6.8	3.2	309	(21)
Difference between highest and lowest scale value	33.5					

Table 8: Influence on working hours (3 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Teaching and research staff in universities	82.8	19.7	0.0	40.7	270	(24)
Engineers (Construction)	79.9	16.8	0.0	23.7	346	(4)
Business managers	75.6	18.5	0.3	19.6	317	(15)
Technical draughtsmen	69.2	20.5	0.0	12.5	319	(11)
Office workers	66.1	21.8	0.3	13.7	292	(16)
Police officers	59.6	22.0	0.3	6.3	300	(12)
Private bankers	57.3	21.7	0.3	4.9	365	(13)
Smith workers	54.7	22.7	2.1	6.2	241	(19)
Sales assistants in shops	54.4	23.8	2.1	6.3	284	(39)
Medical doctors	50.2	23.0	1.2	4.6	260	(7)
Mail carriers	47.0	21.0	1.5	3.5	260	(27)
Health care helpers	46.1	22.6	2.8	4.2	216	(32)
Slaughterhouse workers	35.7	26.7	10.9	2.0	294	(36)
Primary school teachers	23.7	19.2	18.9	0.3	291	(30)
Difference between highest and lowest scale value	59.1					

Table 9: Possibilities for development (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Teaching and research staff in universities	77.6	16.9	0.0	13.7	271	(23)
Medical doctors	77.4	17.4	0.0	16.5	261	(6)
Business managers	72.6	16.9	0.0	9.2	317	(15)
Engineers (Construction)	68.3	14.8	0.3	1.5	346	(4)
Health care helpers	66.6	19.1	0.0	6.9	219	(29)
Private bankers	64.4	17.8	0.3	2.5	366	(12)
Primary school teachers	62.6	17.3	0.0	2.3	307	(14)
Smith workers	60.7	20.4	0.4	4.9	247	(13)
Office workers	60.0	18.8	0.3	1.7	294	(14)
Police officers	59.2	17.2	0.0	1.3	301	(11)
Technical draughtsmen	58.2	18.4	1.3	1.3	320	(10)
Sales assistants in shops	54.4	22.6	1.1	2.8	284	(39)
Mail carriers	41.7	20.9	2.3	0.4	265	(22)
Slaughterhouse workers	41.5	22.0	3.2	0.3	313	(17)
Difference between highest and lowest scale value	36.1					

Table 10: Role clarity (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Mail carriers	76.2	14.4	0.0	10.3	262	(25)
Medical doctors	76.0	14.8	0.0	11.5	260	(7)
Health care helpers	75.6	16.4	0.0	16.1	218	(30)
Private bankers	73.4	15.5	0.0	8.3	361	(17)
Sales assistants in shops	71.5	18.8	0.0	9.0	278	(45)
Business managers	70.8	17.6	0.3	9.5	316	(16)
Slaughterhouse workers	70.7	16.6	0.0	6.8	310	(20)
Office workers	70.5	17.0	0.0	7.9	293	(15)
Smith workers	70.3	16.2	0.0	6.6	244	(16)
Police officers	69.3	15.6	0.0	3.7	300	(12)
Engineers (Construction)	68.5	15.8	0.3	2.6	344	(6)
Technical draughtsmen	68.2	15.9	0.0	4.7	318	(12)
Primary school teachers	67.9	16.5	0.0	5.5	307	(14)
Teaching and research staff in universities	66.2	20.1	0.0	8.6	269	(25)
Difference between highest and lowest scale value	10.0					

Table 11: Role conflicts (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Primary school teachers	49.8	21.7	0.7	2.6	307	(14)
Health care helpers	45.9	19.8	1.8	0.9	218	(30)
Police officers	44.9	19.9	2.0	0.7	299	(13)
Sales assistants in shops	40.7	21.6	2.5	1.4	278	(45)
Medical doctors	39.7	19.3	2.7	0.8	259	(8)
Mail carriers	39.7	20.6	2.3	0.0	260	(27)
Smith workers	39.4	20.4	2.9	1.7	243	(17)
Private bankers	39.3	18.8	2.5	0.3	361	(17)
Slaughterhouse workers	39.3	21.3	3.2	0.7	309	(21)
Teaching and research staff in universities	38.9	19.5	1.5	0.0	269	(25)
Business managers	38.1	19.3	3.2	0.3	316	(16)
Technical draughtsmen	37.5	19.6	0.8	0.0	318	(12)
Engineers (Construction)	35.1	16.3	2.9	0.0	344	(6)
Office workers	34.7	18.9	2.1	0.3	292	(16)
Difference between highest and lowest scale value	15.2					

Table 12: Predictability (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Business managers	61.8	20.7	0.6	3.2	313	(19)
Teaching and research staff in universities	61.7	19.9	0.0	4.1	266	(28)
Private bankers	58.5	20.4	0.8	2.0	356	(22)
Engineers (Construction)	56.4	19.2	0.9	0.3	336	(14)
Office workers	54.4	19.9	0.4	0.4	286	(22)
Primary school teachers	53.9	18.3	0.3	0.7	306	(15)
Medical doctors	53.5	20.0	0.0	1.9	259	(8)
Technical draughtsmen	53.4	21.4	1.0	1.6	312	(18)
Sales assistants in shops	51.9	23.7	3.0	3.0	267	(56)
Health care helpers	51.8	19.8	0.0	1.8	217	(31)
Mail carriers	51.1	21.5	1.9	0.8	259	(28)
Slaughterhouse workers	46.6	25.5	5.0	3.0	301	(29)
Smith workers	45.9	24.1	3.3	1.3	240	(20)
Police officers	43.0	17.8	1.3	0.3	298	(14)
Difference between highest and lowest scale value	18.8					

Table 13: Possibilities for performing work tasks (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Business managers	69.5	13.7	0.0	2.6	309	(23)
Engineers (Construction)	68.3	13.8	0.0	1.2	335	(15)
Teaching and research staff in universities	67.5	16.2	0.4	2.7	262	(32)
Smith workers	67.0	17.0	0.0	5.0	238	(22)
Office workers	66.3	16.7	0.0	3.5	283	(25)
Technical draughtsmen	65.7	15.5	0.0	1.9	311	(19)
Medical doctors	64.0	16.6	0.0	2.7	257	(10)
Private bankers	62.8	14.2	0.0	0.6	353	(25)
Sales assistants in shops	62.6	19.2	0.4	4.6	263	(60)
Slaughterhouse workers	61.6	18.8	0.0	2.3	300	(30)
Mail carriers	59.5	18.4	0.0	1.5	260	(27)
Health care helpers	58.9	16.7	0.0	2.3	216	(32)
Primary school teachers	56.5	17.3	0.0	1.0	304	(17)
Police officers	53.5	16.2	0.3	0.7	291	(21)
Difference between highest and lowest scale value	16.0					

Table 14: Unnecessary work tasks (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Police officers	44.8	20.3	2.4	0.3	291	(21)
Medical doctors	43.3	19.3	0.8	0.4	257	(10)
Primary school teachers	41.7	20.5	2.6	0.7	303	(18)
Health care helpers	39.3	17.0	2.3	0.0	216	(32)
Teaching and research staff in universities	37.2	20.7	3.1	1.2	261	(33)
Smith workers	36.9	19.4	3.4	0.0	237	(23)
Mail carriers	36.6	19.6	4.3	1.2	259	(28)
Private bankers	36.2	17.8	2.6	0.0	353	(25)
Slaughterhouse workers	34.7	21.0	8.3	0.3	300	(30)
Sales assistants in shops	33.8	21.8	9.2	0.8	262	(61)
Business managers	32.2	17.9	4.2	0.3	307	(25)
Office workers	32.1	19.6	6.1	0.4	280	(28)
Technical draughtsmen	32.0	18.0	4.8	0.0	311	(19)
Engineers (Construction)	31.7	16.9	3.9	0.0	335	(15)
Difference between highest and lowest scale value	13.1					

Domain: Interpersonal relations: cooperation and leadership

Table 15: Social support from colleagues (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Primary school teachers	76.0	14.8	0.0	11.5	304	(17)
Police officers	74.2	15.5	0.0	7.0	285	(27)
Private bankers	73.8	16.3	0.0	9.2	348	(30)
Health care helpers	72.2	17.8	0.0	11.5	208	(40)
Medical doctors	71.1	15.6	0.0	3.6	252	(15)
Business managers	70.6	16.4	0.0	6.4	299	(33)
Sales assistants in shops	70.5	20.8	0.0	13.0	253	(70)
Office workers	70.2	18.3	0.0	8.6	278	(30)
Technical draughtsmen	69.2	18.2	0.0	5.0	301	(29)
Teaching and research staff in universities	68.7	18.6	0.4	7.2	251	(43)
Engineers (Construction)	68.7	16.0	0.0	3.6	331	(19)
Smith workers	67.3	18.0	0.0	5.7	228	(32)
Mail carriers	63.6	18.7	1.2	3.6	252	(35)
Slaughterhouse workers	60.7	19.2	0.0	3.2	278	(52)
Difference between highest and lowest scale value	15.3					

Table 16: Cooperation between colleagues within teams, departments, or groups (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Police officers	70.8	15.3	0.0	3.9	285	(27)
Sales assistants in shops	68.9	20.3	0.8	9.9	253	(70)
Medical doctors	68.8	14.7	0.0	3.2	252	(15)
Private bankers	68.1	16.0	0.0	4.0	348	(30)
Health care helpers	67.9	19.4	0.5	7.7	208	(40)
Primary school teachers	67.8	14.9	0.3	3.0	304	(17)
Business managers	67.3	15.6	0.0	4.7	299	(33)
Engineers (Construction)	65.7	15.8	0.3	1.8	331	(19)
Office workers	65.6	18.6	0.7	5.0	278	(30)
Technical draughtsmen	65.0	17.6	0.3	2.3	301	(29)
Smith workers	64.8	17.8	0.4	4.8	228	(32)
Teaching and research staff in universities	62.9	20.0	0.0	4.4	251	(43)
Mail carriers	60.2	19.5	1.2	3.6	252	(35)
Slaughterhouse workers	57.6	19.8	0.4	3.2	278	(52)
Difference between highest and lowest scale value	13.2					

Table 17: Trust between colleagues (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Primary school teachers	76.4	14.3	0.0	10.5	304	(17)
Medical doctors	74.7	14.4	0.0	7.5	252	(15)
Police officers	74.6	14.6	0.0	6.7	285	(27)
Private bankers	73.1	15.4	0.0	6.6	348	(30)
Teaching and research staff in universities	72.5	17.5	0.4	10.0	251	(43)
Business managers	72.4	15.6	0.0	7.4	299	(33)
Engineers (Construction)	72.2	14.3	0.0	4.8	331	(19)
Health care helpers	71.7	16.9	0.0	11.1	208	(40)
Sales assistants in shops	71.4	19.9	0.4	13.0	253	(70)
Technical draughtsmen	70.8	16.9	0.0	8.0	301	(29)
Office workers	70.7	18.1	0.4	9.4	278	(30)
Smith workers	66.7	18.3	0.9	5.3	228	(32)
Mail carriers	64.2	16.9	0.8	4.0	252	(35)
Slaughterhouse workers	60.9	18.3	0.0	3.6	278	(52)
Difference between highest and lowest scale value	15.5					

Table 18: Social support from management (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Private bankers	71.6	19.0	0.3	11.2	339	(39)
Business managers	66.9	21.1	0.7	6.9	289	(43)
Engineers (Construction)	66.6	18.0	0.6	2.8	323	(27)
Health care helpers	65.7	23.4	2.0	12.0	200	(48)
Sales assistants in shops	65.7	23.8	0.8	11.2	249	(74)
Medical doctors	65.4	21.0	0.0	7.8	245	(22)
Office workers	65.3	23.6	1.8	12.1	273	(35)
Teaching and research staff in universities	65.2	23.3	1.3	11.8	238	(56)
Technical draughtsmen	63.7	21.2	1.3	5.0	299	(31)
Primary school teachers	63.2	20.6	0.7	5.3	284	(37)
Mail carriers	62.7	24.0	3.6	6.9	248	(39)
Police officers	62.1	20.6	0.7	3.3	276	(36)
Smith workers	61.2	22.7	1.4	4.6	220	(40)
Slaughterhouse workers	56.7	22.8	1.9	3.8	266	(64)
Difference between highest and lowest scale value	14.9					

Table 19: Quality of leadership (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Private bankers	65.2	20.6	1.2	6.5	339	(39)
Health care helpers	60.4	25.0	2.0	9.0	200	(48)
Medical doctors	59.5	20.9	0.8	3.7	245	(22)
Engineers (Construction)	59.1	19.3	0.9	2.2	323	(27)
Sales assistants in shops	58.3	25.9	2.4	8.8	249	(74)
Business managers	58.3	21.6	2.1	5.5	289	(43)
Teaching and research staff in universities	57.0	24.3	1.3	7.2	237	(57)
Office workers	56.6	26.3	4.4	6.6	273	(35)
Police officers	56.3	21.8	3.6	3.3	276	(36)
Primary school teachers	55.4	22.4	2.1	3.2	284	(37)
Technical draughtsmen	55.1	22.2	3.3	2.3	299	(31)
Mail carriers	54.7	23.9	4.0	2.4	248	(39)
Smith workers	50.1	26.3	7.3	4.6	220	(40)
Slaughterhouse workers	48.7	23.9	6.4	1.1	266	(64)
Difference between highest and lowest scale value	16.5					

Table 20: Cooperation with immediate supervisor (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Private bankers	68.8	19.2	0.6	8.0	339	(39)
Engineers (Construction)	66.5	17.3	0.0	2.5	323	(27)
Medical doctors	65.8	19.4	0.0	4.5	245	(22)
Teaching and research staff in universities	65.3	22.4	0.8	8.0	237	(57)
Sales assistants in shops	64.6	23.9	1.6	10.4	249	(74)
Business managers	64.3	20.9	1.0	6.2	289	(43)
Health care helpers	63.2	21.9	1.5	8.0	200	(48)
Technical draughtsmen	62.6	20.6	1.0	3.0	299	(31)
Office workers	62.4	23.1	1.8	7.0	273	(35)
Police officers	61.6	20.5	2.2	2.9	276	(36)
Primary school teachers	61.1	21.3	1.8	4.2	284	(37)
Mail carriers	59.1	22.3	2.4	5.4	248	(39)
Smith workers	58.9	22.9	2.3	4.6	220	(40)
Slaughterhouse workers	53.3	22.4	3.0	1.9	266	(64)
Difference between highest and lowest scale value	15.5					

Table 21: Justice in the workplace (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Business managers	70.0	17.4	0.0	5.3	301	(31)
Medical doctors	67.9	15.3	0.0	2.8	248	(19)
Engineers (Construction)	67.6	14.3	0.0	1.5	330	(20)
Primary school teachers	65.3	16.6	0.0	2.3	302	(19)
Sales assistants in shops	64.1	21.3	0.4	5.8	257	(66)
Private bankers	64.0	16.8	0.6	1.8	340	(38)
Teaching and research staff in universities	63.9	19.2	0.4	3.7	243	(51)
Health care helpers	63.4	17.3	1.0	3.9	207	(41)
Office workers	62.9	19.0	1.1	2.9	274	(34)
Mail carriers	60.7	18.1	1.2	2.4	248	(39)
Technical draughtsmen	60.3	17.7	0.7	0.7	298	(32)
Smith workers	58.5	18.2	0.4	2.2	232	(28)
Police officers	54.1	17.6	1.7	0.4	287	(25)
Slaughterhouse workers	53.1	19.4	1.4	1.8	284	(46)
Difference between highest and lowest scale value	16.9					

Table 22: Involvement of employees (3 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Business managers	65.3	20.3	1.3	8.6	301	(31)
Medical doctors	63.3	19.8	0.4	7.7	247	(20)
Engineers (Construction)	62.6	19.1	0.6	4.9	330	(20)
Health care helpers	61.2	21.6	1.9	9.2	206	(42)
Private bankers	61.2	21.1	1.8	6.2	339	(39)
Primary school teachers	59.3	21	1.3	4.0	300	(21)
Teaching and research staff in universities	58.5	21.6	1.3	6.7	240	(54)
Office workers	57.9	22	3.7	5.2	272	(36)
Technical draughtsmen	56.6	21.1	2.0	3.7	298	(32)
Sales assistants in shops	56.5	24.8	3.1	7.4	256	(67)
Mail carriers	53.3	21.5	2.0	3.6	248	(39)
Smith workers	52.7	24.9	3.9	4.3	231	(29)
Slaughterhouse workers	45.1	21.7	5.7	1.4	281	(49)
Police officers	41.6	21.3	7.1	1.1	283	(29)
Difference between highest and lowest scale value	23.7					

Table 23: Changes in the workplace (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Business managers	59.8	20.6	0.0	3.2	118	(26)
Medical doctors	54.8	18.1	0.6	1.2	68	(18)
Engineers (Construction)	52.9	19.5	0.9	0.5	78	(18)
Sales assistants in shops	50.0	22.1	1.8	2.7	41	(65)
Mail carriers	49.3	19.2	1.4	1.4	135	(36)
Private bankers	48.0	20.2	1.1	1.1	175	(33)
Teaching and research staff in universities	47.5	22.5	2.4	0.6	78	(42)
Health care helpers	47.2	20.9	1.9	2.8	45	(38)
Office workers	46.8	21.7	3.1	2.1	102	(32)
Technical draughtsmen	46.7	20.7	3.0	0.5	96	(28)
Primary school teachers	45.9	19.8	0.6	1.1	61	(18)
Smith workers	40.9	24.0	7.1	2.1	48	(26)
Slaughterhouse workers	38.4	20.4	3.8	0.5	99	(42)
Police officers	33.3	18.0	4.3	0.0	83	(23)
Difference between highest and lowest scale value	26.5					

* Participants answering that they had not experienced any changes within the last two years did not respond to this question

Table 24: Recognition (1 item)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Medical doctors	71.6	21.8	0.4	24.4	246	(21)
Business managers	68.7	23.1	1.7	19.9	301	(31)
Engineers (Construction)	67.9	22.2	1.2	18.2	329	(21)
Office workers	65.8	24.1	2.9	17.2	273	(35)
Private bankers	65.4	21.8	1.8	14.2	339	(39)
Primary school teachers	65.3	23.1	2.3	15.7	300	(21)
Health care helpers	65.2	24.5	3.4	18.8	207	(41)
Teaching and research staff in universities	63.8	25.0	2.5	18.3	240	(54)
Sales assistants in shops	62.0	28.7	5.9	21.3	254	(69)
Technical draughtsmen	59.8	24.2	4.4	10.4	297	(33)
Smith workers	58.5	26.9	6.1	12.6	230	(30)
Police officers	57.9	23.9	4.9	8.4	286	(26)
Mail carriers	57.6	24.4	4.4	8.4	249	(38)
Slaughterhouse workers	50.1	24.6	7.1	6.1	281	(49)
Difference between highest and lowest scale value	21.5					

Domain: Reactions to the work situation

Table 25: Experience of meaning at work (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Medical doctors	81.7	15.1	0.0	24.2	260	(7)
Business managers	76.5	17.4	0.0	18.0	316	(16)
Health care helpers	76.2	16.5	0.0	15.1	218	(30)
Teaching and research staff in universities	75.5	18.4	0.0	18.6	269	(25)
Engineers (Construction)	72.8	16.9	0.3	10.5	344	(6)
Primary school teachers	72.7	15.8	0.0	9.1	307	(14)
Technical draughtsmen	69.7	16.8	0.3	7.2	318	(12)
Office workers	69.2	19.2	0.0	9.9	293	(15)
Police officers	68.4	17.0	0.3	5.0	300	(12)
Smith workers	67.7	18.9	0.0	9.0	244	(16)
Private bankers	67.6	16.9	0.0	5.8	362	(16)
Sales assistants in shops	62.9	23.2	2.5	7.6	278	(45)
Mail carriers	58.8	21.0	1.9	3.8	262	(25)
Slaughterhouse workers	53.6	24.6	2.6	5.5	310	(20)
Difference between highest and lowest scale value	28.1					

Table 26: Commitment to the workplace (4 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(mis- sing)
Medical doctors	73.8	20.2	0.0	17.1	246	(21)
Business managers	72.9	21.7	0.7	17.3	301	(31)
Engineers (Construction)	72.4	19.4	0.3	12.5	329	(21)
Teaching and research staff in universities	68.7	21.1	0.8	13.3	241	(53)
Private bankers	68.7	20.5	0.6	13.5	340	(38)
Health care helpers	68.1	21.7	1.0	15.0	207	(41)
Office workers	67.6	23.5	0.4	15.3	274	(34)
Primary school teachers	67.2	21.8	0.3	12.3	301	(20)
Technical draughtsmen	65.2	21.9	1.0	9.1	297	(33)
Sales assistants in shops	63.6	27.0	2.4	16.9	255	(68)
Police officers	61.5	21.7	1.4	4.9	287	(25)
Smith workers	61.3	24.6	1.7	7.0	230	(30)
Mail carriers	53.6	22.6	2.0	4.0	249	(38)
Slaughterhouse workers	49.4	25.2	6.4	4.3	281	(49)
Difference between highest and lowest scale value	24.4					

Table 27: Work engagement (9 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(mis- sing)
Medical doctors	71.3	15.5	0.8	1.2	246	(21)
Business managers	71.0	18.1	0.7	2.0	300	(32)
Health care helpers	69.6	18.9	1.0	3.4	207	(41)
Engineers (Construction)	68.6	15.3	0.0	1.6	329	(21)
Primary school teachers	68.0	15.4	0.0	1.0	301	(20)
Office workers	67.8	17.0	0.0	2.2	274	(34)
Technical draughtsmen	67.7	17.1	0.7	1.0	294	(36)
Teaching and research staff in universities	67.3	18.2	1.7	2.5	239	(55)
Private bankers	66.8	16.2	0.0	1.8	340	(38)
Smith workers	66.5	17.3	0.0	3.9	229	(31)
Sales assistants in shops	65.3	19.5	0.4	3.5	255	(68)
Police officers	64.5	15.1	0.4	0.0	283	(29)
Mail carriers	60.0	19.6	0.8	3.2	248	(39)
Slaughterhouse workers	56.8	22.4	1.4	1.1	281	(49)
Difference between highest and lowest scale value	14.5					

Table 28: Job insecurity (3 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Slaughterhouse workers	51.2	27.7	8.5	7.1	281	(49)
Mail carriers	50.5	28.1	8.2	6.9	245	(42)
Private bankers	43.9	27.2	8.3	5.0	338	(40)
Health care helpers	39.7	27.6	13.1	3.4	206	(42)
Office workers	39.4	26.1	8.9	4.4	271	(37)
Technical draughtsmen	36.8	24.9	11.8	2.0	297	(33)
Sales assistants in shops	33.2	24.8	15.3	2.8	255	(68)
Smith workers	32.6	25.9	20.0	1.7	230	(30)
Teaching and research staff in universities	32.4	25.9	16.3	1.3	240	(54)
Business managers	29.1	22.4	18.4	0.3	299	(33)
Primary school teachers	27.7	23	21.1	1.7	297	(24)
Police officers	26.3	19.8	13.7	0.0	284	(28)
Engineers (Construction)	22.2	20.1	25.3	0.0	328	(22)
Medical doctors	14.9	19.6	43.9	0.4	244	(23)
Difference between highest and lowest scale value	36.3					

Table 29: Self-reported stress (1 item)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Teaching and research staff in universities	49.1	26.2	8.9	6.8	235	(59)
Primary school teachers	42.2	26.6	15.2	4.1	296	(25)
Health care helpers	41.5	26.8	16.1	3.4	205	(43)
Medical doctors	40.8	26.3	17.6	2.0	245	(22)
Office workers	40.4	25.0	12.5	3.7	272	(36)
Private bankers	39.6	26.3	16.0	4.1	338	(40)
Sales assistants in shops	38.3	27.8	20.6	3.6	253	(70)
Technical draughtsmen	37.9	26.9	21.2	3.8	292	(38)
Engineers (Construction)	37.0	24.4	15.9	2.5	327	(23)
Mail carriers	36.0	26.2	21.1	2.0	247	(40)
Business managers	35.3	25.1	20.5	1.7	298	(34)
Police officers	34.7	24.5	21.0	1.1	276	(36)
Slaughterhouse workers	33.8	27.1	23.7	3.7	270	(60)
Smith workers	28.6	24.7	31.1	0.4	228	(32)
Difference between highest and lowest scale value	20.5					

Table 30: Job satisfaction (1 item)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Medical doctors	78.5	17.4	0.0	15.1	252	(15)
Business managers	77.7	17.9	0.7	14.6	302	(30)
Engineers (Construction)	77.3	16.7	0.0	12.6	333	(17)
Teaching and research staff in universities	75.3	19.7	0.4	13.4	254	(40)
Technical draughtsmen	75.1	19.3	0.7	11.3	301	(29)
Office workers	74.3	20.4	0.4	13.4	284	(24)
Private bankers	74.1	17.5	0.0	8.5	354	(24)
Smith workers	73.1	20.7	0.0	12.6	238	(22)
Police officers	73.0	19.4	0.4	9.0	288	(24)
Health care helpers	72.9	20.6	0.0	17.2	209	(39)
Primary school teachers	69.2	20.9	0.7	6.9	304	(17)
Sales assistants in shops	69.0	23.0	1.1	13.3	263	(60)
Mail carriers	67.4	23.5	2.8	8.7	254	(33)
Slaughterhouse workers	64.2	25.5	1.0	11.2	295	(35)
Difference between highest and lowest scale value	14.3					

Table 31: Overall assessment of the psychosocial work environment (1 item)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(missing)
Engineers (Construction)	75.0	20.1	0.3	13.2	334	(16)
Business managers	74.6	20.4	0.1	13.3	302	(30)
Medical doctors	72.3	21.2	0.0	12.7	252	(15)
Private bankers	70.4	19.7	0.0	7.3	354	(24)
Technical draughtsmen	68.3	23.2	1.3	8.3	301	(29)
Office workers	68.1	25.0	1.4	12.7	284	(24)
Smith workers	66.9	25.3	0.8	14.4	237	(23)
Teaching and research staff in universities	66.8	24.2	1.2	9.8	254	(40)
Sales assistants in shops	66.5	27.0	1.9	14.1	263	(60)
Health care helpers	63.6	24.3	1.0	11.5	209	(39)
Police officers	63.3	23.1	2.1	3.8	288	(24)
Primary school teachers	60.0	24.0	1.7	4.0	303	(18)
Mail carriers	59.2	25.4	4.3	5.9	254	(33)
Slaughterhouse workers	56.5	27.2	4.1	6.1	294	(36)
Difference between highest and lowest scale value	18.5					

Table 32: Conflict between work-life and private life (3 items)

Job Group	Mean	SD	Floor pct.	Ceiling pct.	N	(mis- sing)
Teaching and research staff in universities	44.6	25.6	8.1	3.8	235	(59)
Primary school teachers	41.4	23.4	7.8	1.7	296	(25)
Medical doctors	41.2	21.1	7.4	0.8	245	(22)
Business managers	37.1	24.0	13.8	1.3	298	(34)
Slaughterhouse workers	34.9	24.7	15.3	1.1	274	(56)
Engineers (Construction)	34.9	21.5	10.1	0.3	327	(23)
Mail carriers	32.7	22.0	11.7	0.8	249	(38)
Sales assistants in shops	32.2	26.0	18.5	3.5	254	(69)
Police officers	31.6	20.4	10.8	0.4	277	(35)
Private bankers	31.4	23.2	14.2	2.1	338	(40)
Health care helpers	30.5	26.4	24.4	1.5	205	(43)
Office workers	27.7	22.6	20.2	1.1	272	(36)
Technical draughtsmen	27.2	22.7	22.9	1.0	293	(37)
Smith workers	26.4	20.3	21.1	0.4	228	(32)
Difference between highest and lowest scale value	18.2					

e-Appendix 9: Assessment of factorial validity: Results from job group-specific confirmatory factor analyses (CFA) for 22 multi-item scales with four or more items

Domain: Demands at work

Table 1: Quantitative demands (4 items)

Job group	Model fit indeces			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	26.0/2	0.204	0.983	0.044
2. Technical draughtsmen	32.4/2	0.220	0.982	0.048
3. Teaching and research staff in universities	12.4/2	0.140	0.989	0.032
4. Health care helpers	2.2/2	0.022	1.000	0.015
5. Primary school teachers	8.2/2	0.100	0.998	0.018
6. Medical doctors	5.8/2	0.086	0.996	0.019
7. Mail carriers	6.8/2	0.096	0.995	0.025
8. Slaughterhouse workers	4.3/2	0.061	0.997	0.018
9. Smith workers	6.6/2	0.098	0.995	0.024
10. Engineers (construction)	16.5/2	0.147	0.986	0.044
11. Sales assistants in shops	11.9/2	0.136	0.995	0.025
12. Private bankers	14.0/2	0.129	0.997	0.018
13. Business managers	33.9/2	0.226	0.973	0.061
14. Police officers	30.2/2	0.217	0.982	0.046

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 2: Emotional demands (4 items)

Job group	Model fit indeces			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	19.2/2	0.175	0.985	0.039
2. Technical draughtsmen	3.3/2	0.046	0.998	0.024
3. Teaching and research staff in universities	6.9/2	0.096	0.997	0.026
4. Health care helpers	2.6/2	0.037	0.999	0.024
5. Primary school teachers	8.5/2	0.104	0.995	0.025
6. Medical doctors	7.2/2	0.101	0.994	0.032
7. Mail carriers	0.8/2	0.000	1.000	0.010
8. Slaughterhouse workers	14.4/2	0.145	0.982	0.036
9. Smith workers	4.5/2	0.075	0.997	0.027
10. Engineers (construction)	0.6/2	0.000	1.000	0.009
11. Sales assistants in shops	4.5/2	0.070	0.997	0.025
12. Private bankers	7.4/2	0.087	0.996	0.021
13. Business managers	8.6/2	0.104	0.994	0.029
14. Police officers	103.0/2	0.412	0.943	0.101

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 3: Cognitive demands (4 items)

Job group	Model fit indices			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	1.5/2	0.000	1.000	0.013
2. Technical draughtsmen	0.4/2	0.000	1.000	0.006
3. Teaching and research staff in universities	12.2/2	0.138	0.980	0.047
4. Health care helpers	0.9/2	0.000	1.000	0.011
5. Primary school teachers	3.7/2	0.053	0.996	0.022
6. Medical doctors	3.1/2	0.046	0.997	0.024
7. Mail carriers	2.0/2	0.009	1.000	0.020
8. Slaughterhouse workers	5.0/2	0.071	0.998	0.025
9. Smith workers	5.2/2	0.081	0.996	0.021
10. Engineers (construction)	1.4/2	0.000	1.000	0.014
11. Sales assistants in shops	1.0/2	0.000	1.000	0.010
12. Private bankers	3.2/2	0.041	0.998	0.019
13. Business managers	1.9/2	0.000	1.000	0.011
14. Police officers	1.1/2	0.000	1.000	0.013

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 4: Work without boundaries (4 items)

Job group	Model fit indeces			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	3.3/2	0.048	0.999	0.015
2. Technical draughtsmen	33.2/2	0.223	0.987	0.047
3. Teaching and research staff in universities	3.2/2	0.047	1.000	0.011
4. Health care helpers	0.1/2	0.000	1.000	0.004
5. Primary school teachers	4.6/2	0.066	0.999	0.018
6. Medical doctors	1.7/2	0.000	1.000	0.012
7. Mail carriers	3.9/2	0.061	0.991	0.037
8. Slaughterhouse workers	5.8/2	0.080	0.990	0.038
9. Smith workers	7.6/2	0.108	0.992	0.041
10. Engineers (construction)	3.8/2	0.052	0.999	0.015
11. Sales assistants in shops	2.6/2	0.033	0.999	0.019
12. Private bankers	9.9/2	0.105	0.989	0.033
13. Business managers	4.7/2	0.066	0.999	0.018
14. Police officers	4.7/2	0.068	0.991	0.034

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Domain: Work organization and job content

Table 5: Influence at work (4 items)

Job group	Model fit indices			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	9.2/2	0.111	0.997	0.025
2. Technical draughtsmen	3.8/2	0.053	0.999	0.015
3. Teaching and research staff in universities	7.4/2	0.100	0.996	0.030
4. Health care helpers	6.6/2	0.103	0.997	0.024
5. Primary school teachers	10.4/2	0.118	0.993	0.030
6. Medical doctors	11.1/2	0.133	0.991	0.029
7. Mail carriers	17.5/2	0.175	0.991	0.033
8. Slaughterhouse workers	4.1/2	0.060	0.999	0.011
9. Smith workers	0.0/2	0.000	1.000	0.001
10. Engineers (construction)	13.9/2	0.131	0.993	0.037
11. Sales assistants in shops	14.9/2	0.151	0.991	0.027
12. Private bankers	14.6/2	0.132	0.990	0.031
13. Business managers	23.0/2	0.182	0.996	0.041
14. Police officers	17.2/2	0.159	0.986	0.032

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 6: Possibilities for development (4 items)

Job group	Model fit indices			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	3.7/2	0.054	0.999	0.016
2. Technical draughtsmen	22.3/2	0.179	0.985	0.038
3. Teaching and research staff in universities	1.8/2	0.000	1.000	0.014
4. Health care helpers	15.3/2	0.174	0.986	0.039
5. Primary school teachers	47.0/2	0.272	0.961	0.074
6. Medical doctors	18.0/2	0.175	0.988	0.032
7. Mail carriers	7.2/2	0.100	0.996	0.024
8. Slaughterhouse workers	18.7/2	0.165	0.987	0.034
9. Smith workers	23.9/2	0.212	0.982	0.043
10. Engineers (construction)	17.5/2	0.150	0.985	0.041
11. Sales assistants in shops	6.3/2	0.087	0.997	0.021
12. Private bankers	16.0/2	0.138	0.993	0.026
13. Business managers	20.0/2	0.169	0.989	0.037
14. Police officers	21.9/2	0.182	0.986	0.041

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 7: Role clarity (4 items)

Job group	Model fit indeces			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	17.5/2	0.162	0.989	0.030
2. Technical draughtsmen	19.1/2	0.164	0.988	0.032
3. Teaching and research staff in universities	27.9/2	0.219	0.982	0.051
4. Health care helpers	3.9/2	0.066	0.999	0.017
5. Primary school teachers	42.4/2	0.256	0.979	0.057
6. Medical doctors	18.0/2	0.175	0.988	0.035
7. Mail carriers	69.4/2	0.360	0.938	0.061
8. Slaughterhouse workers	14.4/2	0.142	0.985	0.034
9. Smith workers	2.3/2	0.026	1.000	0.014
10. Engineers (construction)	24.1/2	0.180	0.986	0.042
11. Sales assistants in shops	14.8/2	0.152	0.987	0.035
12. Private bankers	14.4/2	0.131	0.995	0.030
13. Business managers	17.7/2	0.158	0.993	0.026
14. Police officers	63.4/2	0.320	0.963	0.071

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 8: Role conflicts (4 items)

Job group	Model fit indeces			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	3.0/2	0.043	0.998	0.018
2. Technical draughtsmen	4.8/2	0.067	0.997	0.020
3. Teaching and research staff in universities	7.0/2	0.098	0.988	0.031
4. Health care helpers	2.5/2	0.033	0.999	0.020
5. Primary school teachers	0.2/2	0.000	1.000	0.003
6. Medical doctors	3.3/2	0.050	0.998	0.021
7. Mail carriers	8.0/2	0.109	0.993	0.028
8. Slaughterhouse workers	15.0/2	0.147	0.983	0.030
9. Smith workers	14.9/2	0.165	0.978	0.036
10. Engineers (construction)	0.4/2	0.000	1.000	0.007
11. Sales assistants in shops	5.8/2	0.084	0.995	0.024
12. Private bankers	23.7/2	0.175	0.974	0.041
13. Business managers	7.6/2	0.095	0.993	0.030
14. Police officers	17.4/2	0.160	0.982	0.039

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 9: Predictability (4 items)

Job group	Model fit indeces			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	10.2	0.121	0.992	0.036
2. Technical draughtsmen	13.2	0.135	0.991	0.030
3. Teaching and research staff in universities	4.7	0.072	0.998	0.023
4. Health care helpers	1.1	0.000	1.000	0.015
5. Primary school teachers	16.2	0.154	0.991	0.036
6. Medical doctors	2.4	0.029	0.999	0.017
7. Mail carriers	1.7	0.000	1.000	0.014
8. Slaughterhouse workers	2.1	0.013	1.000	0.015
9. Smith workers	17.7	0.182	0.988	0.031
10. Engineers (construction)	2.7	0.033	1.000	0.012
11. Sales assistants in shops	5.2	0.078	0.997	0.021
12. Private bankers	8.1	0.093	0.996	0.027
13. Business managers	10.3	0.116	0.995	0.030
14. Police officers	0.7	0.000	1.000	0.007

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 10: Possibilities for performing work tasks (4 items)

Job group	Model fit indeces			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	29.3/2	0.220	0.981	0.048
2. Technical draughtsmen	27.9/2	0.204	0.975	0.057
3. Teaching and research staff in universities	19.1/2	0.181	0.974	0.043
4. Health care helpers	4.5/2	0.076	0.997	0.017
5. Primary school teachers	11.7/2	0.127	0.992	0.033
6. Medical doctors	8.7/2	0.114	0.994	0.030
7. Mail carriers	8.8/2	0.115	0.996	0.025
8. Slaughterhouse workers	7.3/2	0.094	0.996	0.024
9. Smith workers	23.9/2	0.215	0.983	0.038
10. Engineers (construction)	19.5/2	0.162	0.983	0.043
11. Sales assistants in shops	18.5/2	0.177	0.989	0.034
12. Private bankers	7.1/2	0.085	0.996	0.023
13. Business managers	11.2/2	0.122	0.991	0.030
14. Police officers	32.3/2	0.228	0.977	0.061

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 11: Unnecessary work tasks (4 items)

Job group	Model fit indices			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	15.6/2	0.157	0.988	0.032
2. Technical draughtsmen	18.2/2	0.162	0.987	0.037
3. Teaching and research staff in universities	17.9/2	0.175	0.985	0.036
4. Health care helpers	11.0/2	0.147	0.973	0.039
5. Primary school teachers	8.3/2	0.102	0.997	0.021
6. Medical doctors	8.5/2	0.112	0.995	0.026
7. Mail carriers	5.8/2	0.086	0.997	0.022
8. Slaughterhouse workers	8.7/2	0.107	0.994	0.024
9. Smith workers	16.2/2	0.173	0.985	0.037
10. Engineers (construction)	19.3/2	0.161	0.986	0.039
11. Sales assistants in shops	35.5/2	0.255	0.967	0.043
12. Private bankers	11.9/2	0.119	0.992	0.034
13. Business managers	11.2/2	0.123	0.993	0.026
14. Police officers	44.4/2	0.270	0.978	0.059

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Domain: Interpersonal relations: cooperation and leadership

Table 12: Social support from colleagues (4 items)

Job group	Model fit indeces			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	40.4/2	0.263	0.974	0.062
2. Technical draughtsmen	51.5/2	0.287	0.971	0.081
3. Teaching and research staff in universities	24.7/2	0.213	0.979	0.044
4. Health care helpers	20.8/2	0.212	0.985	0.034
5. Primary school teachers	19.2/2	0.168	0.992	0.031
6. Medical doctors	46.5/2	0.298	0.949	0.071
7. Mail carriers	26.5/2	0.221	0.982	0.043
8. Slaughterhouse workers	26.7/2	0.211	0.984	0.040
9. Smith workers	32.4/2	0.258	0.978	0.055
10. Engineers (construction)	35.3/2	0.224	0.961	0.060
11. Sales assistants in shops	12.6/2	0.144	0.995	0.027
12. Private bankers	48.2/2	0.258	0.973	0.048
13. Business managers	63.7/2	0.321	0.943	0.079
14. Police officers	61.4/2	0.323	0.963	0.079

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 13: Cooperation between colleagues within teams, departments, or groups (4 items)

Job group	Model fit indices			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	3.9/2	0.059	0.999	0.016
2. Technical draughtsmen	3.3/2	0.047	0.999	0.015
3. Teaching and research staff in universities	12.2/2	0.144	0.992	0.036
4. Health care helpers	19.1/2	0.203	0.989	0.038
5. Primary school teachers	24.1/2	0.191	0.963	0.051
6. Medical doctors	34.3/2	0.254	0.956	0.063
7. Mail carriers	4.7/2	0.074	0.998	0.016
8. Slaughterhouse workers	16.7/2	0.163	0.989	0.032
9. Smith workers	2.0/2	0.000	1.000	0.012
10. Engineers (construction)	11.9/2	0.122	0.989	0.031
11. Sales assistants in shops	28.2/2	0.227	0.987	0.032
12. Private bankers	11.2/2	0.115	0.993	0.028
13. Business managers	7.9/2	0.099	0.995	0.025
14. Police officers	10.1/2	0.119	0.992	0.030

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 14: Trust between colleagues (4 items)

Job group	Model fit indeces			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	18.5/2	0.173	0.989	0.036
2. Technical draughtsmen	26.0/2	0.200	0.984	0.038
3. Teaching and research staff in universities	16.2/2	0.169	0.985	0.040
4. Health care helpers	1.5/2	0.000	1.000	0.010
5. Primary school teachers	24.8/2	0.194	0.985	0.042
6. Medical doctors	20.3/2	0.191	0.975	0.053
7. Mail carriers	17.6/2	0.176	0.978	0.034
8. Slaughterhouse workers	5.2/2	0.076	0.998	0.017
9. Smith workers	4.1/2	0.069	0.998	0.019
10. Engineers (construction)	12.9/2	0.128	0.991	0.032
11. Sales assistants in shops	4.1/2	0.064	0.999	0.014
12. Private bankers	42.9/2	0.243	0.975	0.063
13. Business managers	7.25/2	0.097	0.995	0.024
14. Police officers	22.8/2	0.191	0.978	0.044

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 15: Social support from management (4 items)

Job group	Model fit indeces			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	8.4/2	0.109	0.999	0.013
2. Technical draughtsmen	50.7/2	0.285	0.985	0.047
3. Teaching and research staff in universities	8.3/2	0.116	0.998	0.017
4. Health care helpers	1.4/2	0.000	1.000	0.006
5. Primary school teachers	7.7/2	0.100	0.998	0.015
6. Medical doctors	18.7/2	0.186	0.994	0.026
7. Mail carriers	2.9/2	0.042	1.000	0.009
8. Slaughterhouse workers	6.2/2	0.088	0.999	0.014
9. Smith workers	2.9/2	0.046	1.000	0.009
10. Engineers (construction)	14.8/2	0.141	0.993	0.029
11. Sales assistants in shops	7.2/2	0.103	0.999	0.019
12. Private bankers	17.0/2	0.149	0.995	0.025
13. Business managers	11.0/2	0.125	0.996	0.019
14. Police officers	44.2/2	0.278	0.988	0.039

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 16: Quality of leadership (4 items)

Job group	Model fit indices			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	0.3/2	0.000	1.000	0.002
2. Technical draughtsmen	8.8/2	0.107	0.998	0.016
3. Teaching and research staff in universities	1.4/2	0.000	1.000	0.006
4. Health care helpers	0.2/2	0.000	1.000	0.001
5. Primary school teachers	1.8/2	0.000	1.000	0.007
6. Medical doctors	16.9/2	0.175	0.993	0.031
7. Mail carriers	1.5/2	0.000	1.000	0.006
8. Slaughterhouse workers	9.8/2	0.121	0.998	0.013
9. Smith workers	11.4/2	0.146	0.998	0.015
10. Engineers (construction)	4.2/2	0.058	0.999	0.012
11. Sales assistants in shops	4.1/2	0.065	0.999	0.010
12. Private bankers	1.7/2	0.000	1.000	0.008
13. Business managers	1.3/2	0.000	1.000	0.008
14. Police officers	10.6/2	0.125	0.998	0.017

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 17: Cooperation with immediate supervisor (4 items)

Job group	Model fit indeces			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	3.5/2	0.053	0.999	0.012
2. Technical draughtsmen	1.7/2	0.000	1.000	0.009
3. Teaching and research staff in universities	6.0/2	0.092	0.998	0.016
4. Health care helpers	1.7/2	0.000	1.000	0.006
5. Primary school teachers	11.7/2	0.131	0.996	0.020
6. Medical doctors	0.3/2	0.000	1.000	0.004
7. Mail carriers	1.2/2	0.000	1.000	0.006
8. Slaughterhouse workers	1.2/2	0.000	1.000	0.006
9. Smith workers	4.2/2	0.071	0.999	0.012
10. Engineers (construction)	0.9/2	0.000	1.000	0.009
11. Sales assistants in shops	0.1/2	0.000	1.000	0.002
12. Private bankers	5.1/2	0.068	0.999	0.012
13. Business managers	0.7/2	0.000	1.000	0.006
14. Police officers	3./2	0.042	1.000	0.011

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 18: Justice in the workplace (4 items)

Job group	Model fit indeces			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	54.0/2	0.309	0.988	0.054
2. Technical draughtsmen	24.8/2	0.196	0.990	0.051
3. Teaching and research staff in universities	9.1/2	0.122	0.997	0.023
4. Health care helpers	21.3/2	0.217	0.992	0.027
5. Primary school teachers	33.9/2	0.230	0.993	0.059
6. Medical doctors	14.1/2	0.157	0.994	0.041
7. Mail carriers	22.4/2	0.203	0.994	0.038
8. Slaughterhouse workers	52.7/2	0.299	0.982	0.065
9. Smith workers	23.6/2	0.216	0.989	0.037
10. Engineers (construction)	49.4/2	0.268	0.984	0.069
11. Sales assistants in shops	26.3/2	0.219	0.996	0.041
12. Private bankers	17.8/2	0.152	0.997	0.034
13. Business managers	24.2/2	0.193	0.994	0.050
14. Police officers	12.8/2	0.137	0.997	0.032

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 19: Changes in the workplace (4 items)

Job group	Model fit indeces			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	4.2/2	0.077	0.999	0.018
2. Technical draughtsmen	4.0/2	0.070	0.999	0.023
3. Teaching and research staff in universities	6.8/2	0.120	0.997	0.025
4. Health care helpers	18.3/2	0.277	0.975	0.058
5. Primary school teachers	11.4/2	0.162	0.988	0.037
6. Medical doctors	0.6/2	0.000	1.000	0.008
7. Mail carriers	4.4/2	0.075	0.998	0.017
8. Slaughterhouse workers	13.3/2	0.163	0.989	0.036
9. Smith workers	9.2/2	0.160	0.996	0.030
10. Engineers (construction)	2.6/2	0.037	1.000	0.016
11. Sales assistants in shops	12.7/2	0.220	0.985	0.038
12. Private bankers	8.4/2	0.107	0.997	0.024
13. Business managers	4.9/2	0.081	0.998	0.019
14. Police officers	10.1/2	0.132	0.994	0.028

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Domain: Reactions to the work situation

Table 20: Experience of meaning at work (4 items)

Job group	Model fit indices			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	12.0/2	0.131	0.998	0.019
2. Technical draughtsmen	12.5/2	0.129	0.997	0.021
3. Teaching and research staff in universities	2.5/2	0.030	1.000	0.008
4. Health care helpers	6.7/2	0.104	0.998	0.024
5. Primary school teachers	43.5/2	0.260	0.981	0.048
6. Medical doctors	50.0/2	0.304	0.981	0.060
7. Mail carriers	11.7/2	0.136	0.997	0.021
8. Slaughterhouse workers	8.8/2	0.105	0.998	0.011
9. Smith workers	18.2/2	0.182	0.995	0.023
10. Engineers (construction)	17.3/2	0.149	0.997	0.023
11. Sales assistants in shops	28.1/2	0.217	0.993	0.029
12. Private bankers	31.0/2	0.200	0.994	0.034
13. Business managers	11.9/2	0.125	0.998	0.015
14. Police officers	28.2/2	0.209	0.991	0.041

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 21: Commitment to the workplace (4 items)

Job group	Model fit indices			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	17.9/2	0.170	0.998	0.018
2. Technical draughtsmen	10.5/2	0.120	0.999	0.014
3. Teaching and research staff in universities	19.3/2	0.190	0.995	0.028
4. Health care helpers	5.5/2	0.092	0.999	0.011
5. Primary school teachers	3.4/2	0.048	1.000	0.007
6. Medical doctors	4.9/2	0.077	0.999	0.012
7. Mail carriers	12.5/2	0.145	0.996	0.020
8. Slaughterhouse workers	28.1/2	0.216	0.996	0.021
9. Smith workers	10.9/2	0.139	0.999	0.013
10. Engineers (construction)	11.9/2	0.123	0.999	0.017
11. Sales assistants in shops	2.8/2	0.039	1.000	0.005
12. Private bankers	1.6/2	0.000	1.000	0.005
13. Business managers	6.3/2	0.084	0.999	0.011
14. Police officers	27.6/2	0.211	0.992	0.024

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 22: Work engagement (9 items)

Job group	Model fit indices			
	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	304.6/27	0.194	0.979	0.042
2. Technical draughtsmen	339.5/27	0.199	0.977	0.047
3. Teaching and research staff in universities	266.3/27	0.193	0.980	0.049
4. Health care helpers	161.7/27	0.156	0.988	0.031
5. Primary school teachers	214.7/27	0.152	0.987	0.041
6. Medical doctors	191.3/27	0.158	0.986	0.043
7. Mail carriers	305.3/27	0.205	0.978	0.054
8. Slaughterhouse workers	354.5/27	0.208	0.973	0.048
9. Smith workers	309.0/27	0.214	0.976	0.054
10. Engineers (construction)	234.9/27	0.153	0.986	0.047
11. Sales assistants in shops	292.8/27	0.197	0.982	0.050
12. Private bankers	242.2/27	0.153	0.990	0.033
13. Business managers	281.6/27	0.177	0.988	0.038
14. Police officers	356.5/27	0.208	0.962	0.067

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

e-Appendix 10: Investigation of cross-loadings in the domains *Work organization and job content* and *Demands at work*: Results from job group-specific confirmatory factor analyses (CFA) for multi-item scales in the two domains

Table 1.1 Results of job group specific confirmatory factor analysis of the eight factor solution of the scales in the domain *Work organization and job content*

Job group	Model 1: No cross-loadings				Model 2: With cross-loadings			
	χ^2/DF	RMSEA	CFI	SRMR	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	704/406	0.053	0.957	0.059				
2. Technical draughtsmen	889/406	0.063	0.932	0.066	752/404	0.054	0.951	0.058
3. Teaching and research staff in universities	796/406	0.062	0.931	0.069	679/402	0.053	0.951	0.061
4. Health care helpers	629/406	0.054	0.941	0.071	587/404	0.049	0.951	0.066
5. Primary school teachers	670/406	0.050	0.960	0.060				
6. Medical doctors	808/406	0.065	0.928	0.075	683/402	0.055	0.950	0.065
7. Mail carriers	771/406	0.063	0.937	0.071	667/403	0.054	0.954	0.063
8. Slaughterhouse workers	855/406	0.066	0.945	0.072	767/405	0.060	0.955	0.065
9. Smith workers	680/406	0.056	0.950	0.064				
10. Engineers (construction)	871/406	0.059	0.946	0.064	770/405	0.053	0.957	0.059
11. Sales assistants in shops	725/406	0.058	0.949	0.064	694/405	0.055	0.954	0.061
12. Private bankers	823/406	0.055	0.945	0.060	781/405	0.052	0.951	0.058
13. Business managers	942/406	0.067	0.952	0.061				
14. Police officers	882/406	0.064	0.938	0.064	761/404	0.056	0.954	0.058

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 1.2 Cross-loadings in the ten job groups with unsatisfactory model fit in confirmatory factor analyses of the eight-factor solution of the scales in the domain *Work organization and job content*

Job group	Scale	Item cross-loading on scale
Technical draughtsmen	Influence at work	<ul style="list-style-type: none"> • Are there enough employees at work for you to do your job satisfactorily?
	Possibilities for development	<ul style="list-style-type: none"> • Do you receive timely information about e.g. important decisions, changes and plans for the future at your place of work?
Teaching and research staff in universities	Influence on working hours	<ul style="list-style-type: none"> • Do you have any influence on the order in which you carry out your work tasks?
	Predictability	<ul style="list-style-type: none"> • Do your work tasks vary a lot?
	Possibilities for performing work tasks	<ul style="list-style-type: none"> • Do you have any influence on how you carry out your tasks at work?
Health care helpers	Role clarity	<ul style="list-style-type: none"> • Do you receive timely information about e.g. important decisions, changes and plans for the future at your place of work?
	Possibilities for development	<ul style="list-style-type: none"> • Do you have the tools you need (e.g. technical assistive devices, tools, machinery, IT solutions, etc.) for you to do your job satisfactorily? • Are you informed well in advance of changes to whom you will be working with?
Medical doctors	Possibilities for performing work tasks	<ul style="list-style-type: none"> • Do you have good opportunities for further training and education?
	Possibilities for development	<ul style="list-style-type: none"> • Are there clear goals for your work tasks? • Do you receive timely information about e.g. important decisions, changes and plans for the future at your place of work? • Are there enough employees at work for you to do your job satisfactorily?
Mail carriers	Role clarity	<ul style="list-style-type: none"> • Do you have sufficient authority to deal with the responsibilities you have in your work?
	Possibilities for performing work tasks	<ul style="list-style-type: none"> • Do you have influence on your working hours, e.g. when you arrive at work or when you go home from work?

	Influence on working hours	<ul style="list-style-type: none"> Do you receive timely information about e.g. important decisions, changes and plans for the future at your place of work?
Slaughterhouse workers	Influence at work	<ul style="list-style-type: none"> Are there enough employees at work for you to do your job satisfactorily?
Engineers (construction)	Possibilities for development	<ul style="list-style-type: none"> Do you receive timely information about e.g. important decisions, changes and plans for the future at your place of work?
Sales assistants in shops	Unnecessary work tasks	<ul style="list-style-type: none"> Do you have sufficient authority to deal with the responsibilities you have in your work?
Private bankers	Possibilities for development	<ul style="list-style-type: none"> Do you receive timely information about e.g. important decisions, changes and plans for the future at your place of work?
Police officers	Influence on working hours	<ul style="list-style-type: none"> Do you have any influence on the order in which you carry out your work tasks?
	Possibilities for performing work tasks	<ul style="list-style-type: none"> Do your work tasks vary a lot?

Table 2.1 Results of job group specific confirmatory factor analysis of the six-factor solution of the scales in the domain *Demands at work*

Job group	Model 1: No cross-loadings				Model 2: With cross-loadings			
	χ^2/DF	RMSEA	CFI	SRMR	χ^2/DF	RMSEA	CFI	SRMR
1. Office workers	425/155	0.083	0.949	0.070	366/154	0.074	0.960	0.063
2. Technical draughtsmen	418/155	0.078	0.952	0.066				
3. Teaching and research staff in universities	468/155	0.095	0.925	0.089	306/153	0.067	0.963	0.068
4. Health care helpers	320/155	0.074	0.943	0.079				
5. Primary school teachers	402/155	0.080	0.959	0.076				
6. Medical doctors	405/155	0.084	0.920	0.079	285/154	0.061	0.958	0.066
7. Mail carriers	559/155	0.109	0.873	0.844	274/153	0.060	0.962	0.065
8. Slaughterhouse workers	517/155	0.097	0.875	0.091	385/153	0.078	0.920	0.078
9. Smith workers	410/155	0.090	0.915	0.077	321/154	0.073	0.945	0.067
10. Engineers (construction)	382/155	0.071	0.943	0.064				
11. Sales assistants in shops	510/155	0.099	0.918	0.080	315/153	0.067	0.963	0.061
12. Private bankers	609/155	0.096	0.921	0.080	433/153	0.076	0.951	0.066
13. Business managers	423/155	0.079	0.941	0.072				
14. Police officers	563/155	0.099	0.902	0.082	292/119	0.074	0.952	0.060

Note: RMSEA, Root Mean Square Error of Approximation; CFI, Comparative Fit Index; SRMR, Standardized Root Mean Square Residual

Table 2.2 Cross-loadings in the nine job groups with unsatisfactory model fit in confirmatory factor analyses of the six-factor solution of the scales in the domain *Demands at work*

Job group	Scale	Item cross-loading on scale
Office workers	Quantitative demands	<ul style="list-style-type: none"> How often does your job require you to work overtime, i.e. beyond your agreed or expected working hours?
Teaching and research staff in universities	Quantitative demands	<ul style="list-style-type: none"> How often does your job require you to work overtime, i.e. beyond your agreed or expected working hours?
	Work pace	<ul style="list-style-type: none"> Do you have to pay attention to many things at once in your job?
Medical doctors	Work pace	<ul style="list-style-type: none"> How often does your job require you to work overtime, i.e. beyond your agreed or expected working hours?
	Cognitive demands	<ul style="list-style-type: none"> How often do you receive unscheduled work tasks that place you under time pressure?
Mail carriers	Work pace	<ul style="list-style-type: none"> How often does your job require you to work overtime, i.e. beyond your agreed or expected working hours?
	Quantitative demands	<ul style="list-style-type: none"> Do you have to pay attention to many things at once in your job?
Slaughterhouse workers	Quantitative demands	<ul style="list-style-type: none"> Do you have to pay attention to many things at once in your job?
	Cognitive demands	<ul style="list-style-type: none"> How often do you receive unscheduled work tasks that place you under time pressure?
Smith workers	Work pace	<ul style="list-style-type: none"> Do you have to pay attention to many things at once in your job?
Sales assistants in shops	Work pace	<ul style="list-style-type: none"> How often does your job require you to work overtime, i.e. beyond your agreed or expected working hours? Do you have to pay attention to many things at once in your job?
Private bankers	Quantitative demands	<ul style="list-style-type: none"> How often does your job require you to work overtime, i.e. beyond your agreed or expected working hours?
	Cognitive demands	<ul style="list-style-type: none"> Do you have to work very fast?
Police officers	Work pace	<ul style="list-style-type: none"> Do you have to pay attention to many things at once in your job?

		<ul style="list-style-type: none">• How often do you receive unscheduled work tasks that place you under time pressure?
	Quantitative demands	<ul style="list-style-type: none">• Do you have to work very fast?
	Emotional demands	<ul style="list-style-type: none">• How often do you work at home outside of your normal working hours, e.g. in the evening, during weekends or during holidays?