The Netherlands: Recent Developments in Work Organisation in the EU 27 Member States and Norway

This study on work organisation patterns revealed that teamwork is a relatively widespread phenomenon in the Netherlands. The extent of skill variety and the share of 'active jobs' - as indications of 'learning organisations' - show a decrease since 2007, whereas the extent of cognitive demands increased. It turned out that restructuring and relocation of activities to another country were drivers of work organisation changes. The hotels and restaurants sector was one of the most dynamic sectors in the 2007 to 2009 period, probably due to the economic recession. As expected, work organisation is associated with working conditions.

1. Existing main sources of information dealing with the issue of work organisation at national level and its relation with working conditions, innovation and productivity

Nationally representative sources which deal with the issue of work organisation and related working conditions, innovation and/or productivity include, at employer level, the OSA labour demand panel. This panel is a biennial longitudinal survey among establishments with at least five employees. The 2007-2008 wave will be used for this study to describe prevalences since it contains indicators on teamwork and job/task rotation.

Regarding employee data, the dataset used in this report is the Netherlands Working Conditions Survey (NEA/NWCS, www.tno.nl/nea; Van den Bossche et al., 2008; Koppes et al., 2009 and 2010). It constitutes a yearly, representative sample of about 23.000 Dutch employees, excluding self-employed. The NWCS questionnaire contains several indicators of work design, at the micro level of the job: degree of support from colleagues, and from supervisor, job control and quantitative job demand (and - thus its combinations; cf. the Karasek work organisation typology), degree of skill variety and cognitive demands. The main changes on these indicators can be gauged for a 3-year period (i.e.: 2007, 2008 and 2009), because the questionnaires used were the same in these years. The 2007 wave of the NWCS was used to constitute a longitudinal cohort which was followed for two years. This longitudinal feature allows 'causal' relations to be studied. This examination may –amongst other things- shed light on if changes in work organisation, if any, have been caused by the economic crisis.

Other main sources of information published after mid-2000s providing valuable information on the issue of work organisation are, for instance, being collected at the website of the Dutch National Centre for Social Innovation (NCSI).

Survey innovations on the issue involve the (new) modules on work organisation and high performance organisation practices in the 2010 Netherlands Employer Work Survey (' NEWS'; in Dutch: WEA), which is a nationally representative two-yearly survey (since

2008), among 5.000 (establishments of) Dutch organisations. At employee level, ‘best practices’ in measuring work organisation were recently applied in the 2008-2010 Cohort-study on Social Innovation (CSI).

2. Existing patterns of work organisation at national level and recent evolution in time

The OSA labour demand panel 2007/’08 assesses which work organisation forms are present in the organisations, distinguishing forms such as task/job rotation, team work and quality circles. Task/job rotation was measured by the item/question: ‘employees periodically change task or job’, while the prevalence of team work was measured by the item/question: ‘within the establishment/organisation, are there any teams in which employees, to a large extent, can decide among themselves how the tasks are organised and distributed?’. Besides, there is information on the extent to which these work organisation forms cover all or only a limited number of the employees. The use of quality circles was operationally defined as ‘temporary work groups that analyse a quality problem at the workplace, and try to solve it themselves’.

Table 1 shows that only a quarter of the organisations applies task rotation (on a limited scale (14%), or for all employees (11%)), whereas team work is present in almost two-third of the organisations (22% coverage of a limited number and 42% coverage of (almost) all employees in the establishment). Quality circles can be found in about a quarter of the organisations.

Besides, task rotation is especially present in the Education sector, Public administration and Manufacturing/agriculture. Team work is relatively often present in the Education sector, the Health and well-being sector and in the Real estate sector. Quality circles can also often be found in the Education and Health and well-being sectors, whereas there is only limited use in the Construction sector.

The use of task/job rotation and quality circles is related to scale as well: in larger organisations these practices are more often present. There is no such clear relation between teamwork and organisational size.

Table 1. Task rotation and team work, in % of the organizations, in 2007/8 (*N*=1940).
Table summary: Task rotation and team work, in % of the organizations

	Task rotation			Team work			Quality circles
	for (almost) all employees	for limited number of employees	Total	for (almost) all employees	for limited number of employees	Total	Total
Total	11	14	25	42	22	65	28
Sector							
· Manufacturing and Agriculture	13	20	33	36	26	62	28
· Construction	6	8	13	37	26	63	17
· Wholesale and	12	15	27	38	20	58	20

retail trade, food and accommodation							
· Transport	8	11	19	33	19	51	20
· Real estate	7	11	18	51	21	72	31
· Health and well-being	11	16	27	54	19	73	45
· Other services	6	10	17	34	34	68	27
· Public administration	14	20	34	35	35	70	35
· Education	20	17	38	57	20	77	53
Establishment size							
· 5-9 employees	12	8	20	44	13	56	17
· 10-19 employees	10	16	26	45	27	72	30
· 20-49 employees	12	19	31	40	29	69	39
· 50-99 employees	8	22	31	40	37	77	38
· 100-499 employees	6	30	36	33	38	72	50
· 500 or more employees	11	25	36	32	35	68	50

Sources: Evers & Kerkhofs, 2009, and Borghouts-van de Pas, Van Daalen, Evers et al., 2009.

- employee level, results from the NWCS 2007, 2008 and 2009 (Table 2) show that the scores on the social support indicator were stable - and that the score is rather high, in an absolute sense. The scale means on social supervisory support, job control and quantitative job demands were also rather stable over this 3-year period. However, if we combine the job control and job demand measures into Karasek's work organisation typology (i.e. the job demand-job control model), a different picture comes to the fore for two of the four quadrants. It turns out that especially between 2007 and 2008 there has been some increase in the number of 'passive jobs' (quadrant constituted by low job demand combined with low job control') and a decrease in the number of 'active jobs' (high job demand, high job control). In terms of Karasek's model and its four work organisation types (the quadrants), this implies a shift along the learning diagonal. Conversely, there are no indications for a shift along the model's strain diagonal since the shares of 'relaxed jobs' (low job demand, high job control) and 'high strain jobs' (high job demand low job control) remained the same. In addition, this overall decrease in learning opportunities is also visible on the indicators skill variety and cognitive demands.

Table 2. Work organisation by year, from 2007 to 2009.
Work organisation by year: indicators for work organisation appear to be rather stable. However there is a reduction of active and an increase in passive jobs.

	2007	2008	2009

Number of cases	22,572	21,881	22,645
Social support colleagues (scale: 1=low - 4=high support; 4 items) [Mean]	3.24	3.24	3.26
Social support supervisor (scale: 1=low - 4=high support; 4 items) [Mean]	2.84	2.87	2.88
Job control (method, order, pace autonomy) (scale: 1=low-3=high autonomy; 3 items) [Mean]	2.54	2.53	2.51
Job demand (scale: 1=low - 4= high demand; 4 items) [Mean]	2.32	2.31	2.31
Work organisation typology (i.e. based on Karasek's Job Demand-Job Control Model)			
· Passive job: low job demand low job control	21.9%	24.1%	24.9%
· Relaxed job: low job demand high job control	23.2%	23.5%	23.4%
· Active job: high job demand high job control	27.0%	24.6%	23.8%
· High strain job: high job demand low job control	27.9%	27.9%	28.0%
Skill variety (scale: 1=low - 4=high variety; 3 items) [Mean]	2.72	2.77	2.64
Cognitive demands (scale: 1=low - 4=high demands; 3 items) [Mean]	3.05	3.01	2.97

Source: NWCS 2007, 2008 and 2009

Drivers of the trend in work organisation including effects from the current economic crisis

In Table 3, several potential drivers (including proxies of the economic recession) of changes in the above work organisation indicators are explored. These longitudinal analyses were adjusted for the initial level measured in 2007. Table 3 shows that the indicators show some stability (Beta's range from .24 to. 67). Despite this fact, the potential drivers still significantly predict organizational change to some extent (effects are not very large).

Major restructuring was the first driver examined, and is defined as large-scale restructuring in the organisation, a take-over by another organisation or downsizing with(out) the loss of jobs, in the previous two year(s) (i.e. in 2009 a retrospective question was asked about restructuring since 2007). Major restructuring negatively affects social supervisory support and positively affects job demands (more job demands) and being in a high strain job two years later. Conversely, in case of a major restructuring since 2007 holding a passive job in 2009 is less likely.

Additionally, relocation of activities to another country since 2007 appears to be another driver: such so called 'off-shoring' results in less job control and more cognitive demands two years later.

Two other drivers that were examined, namely outsourcing of supportive services and automation of company activities (both measured by employee self report), were not related to changes in the indicators of work organisation two years later.

Table 3. Drivers predicting work organisation patterns at two years follow-up (2009) (longitudinal regression results – Beta coefficients) (*N*=5412, minimum, to 5754, maximum)

	Time 2 (2009)									
	Social support colleagues	Social support supervisor	Job control	Job demand	Passive job	Relaxed job	Active job	High strain job	Skill variety	Cognitive demands
Time 1 (2007) score	.44*	.45*	.67*	.62*	.46*	.24*	.32*	.45*	.66*	.57*
Major restructuring since 2007 (0=no; 1=yes)	-.00	-.05*	.01	.05*	-.04*	-.02	-.00	.04*	-.01	.02
Outsourcing of supportive services versus since 2007 (0=no; 1=yes)	.01	-.02	.01	.01	-.02	.00	.01	.02	.01	.01
Relocation of activities to another country since 2007 (0=no; 1=yes)	.02	.01	-.02*	.00	.00	.02	-.02	.00	.01	.03*
Automation of company activities since 2007 (0=no; 1=yes)	-.00	.01	.00	.02	-.02	-.00	-.00	.02	.01	.01

*Note. * $p < .05$.*

Source: NWCS longi (2007-2009)

Work organisation in relation to sector, and changes in the pattern of organizational change

Job control and job demand in agriculture are relatively low in 2009, resulting in a high amount of 'passive jobs' (low job demand, low job control), and a low amount of 'active jobs' (high job demand, high job control; see Table 4). Compared to 2007, the share of active jobs in agriculture has decreased in 2009 (Table 5). In 2009, this sector also showed low scores on skill variety and cognitive demands. Conversely, social supervisory support was relatively high, and had increased compared to 2007. Social support from colleagues increased too (Table 5).

In the manufacturing sector (including electricity, gas and water) low social support from colleagues is characteristic, while the construction sector scores average on all work organisation measures, in 2009 (table 4). In the latter sector job control, the share of active jobs and skill variety decreased, compared to 2007 (Table 5).

In the wholesale and retail trade, and the hotels and restaurants sector skill variety and cognitive demands are relatively low (table 4) and decreased compared to 2007 (table 5). In the hotels and restaurants sector cognitive demands had decreased as well (table 5). Moreover, in this latter sector, average job control is low - and decreased-, and there are relatively many 'high strain jobs' (high job demand, low job control), and only few 'relaxed jobs' (low job demand, high job control; table 4). Both quantitative and cognitive job demands had decreased between 2007 and 2009 (table 5).

In the transport and communication sector, social support from the supervisor, job control and skill variety are low.

In the financial intermediation sector, both job control and job demand score high, and (thus) many 'active jobs' (high job demand, high job control) can be found. Cognitive demands are also relatively high (table 4). There are only few 'passive jobs' (low job demand low job control) in this sector.

High job control characterises both the real estate sector and the public administration. Cognitive demands are high in the education sector, and there is much skill variety, although skill variety decreased between 2007 and 2009. In the health sector, there are relatively many high strain jobs. Lastly, skill variety is high in the culture sector/other services. Here, an increase in social supervisory support happened, but a decrease in job control, resulting also in a lower share of active jobs.

In sum, during this two year period, the hotels and restaurants sector ('horeca') appears to be one of the most dynamic national economic sectors in terms of work organisational changes. The decrease in quantitative (and cognitive) job demand was probably due to the economic recession and - hence - less (spending by) customers. It remains unclear, however, why job control decreased too.

Work organisation and organisational size

Regarding the size of the organisation (establishment), it turns out that job demand is lowest in the smallest organisations (Table 6). In these organisations relatively many 'relaxed jobs' (low job demand, high job control) can be found and only few 'high strain jobs' (high job demand, low job control). In addition, low cognitive demands characterise the smallest organisations, or so called 'microenterprises' up to nine employees. Conversely, skill variety

and cognitive demands are highest in the very large organisations, with over 1,000 employees.

Table 4. Work organisation patterns (in 2009) by sector.

	Agriculture	**Manufacturing**	**Construction**	**Wholesale and retail trade**	**Hotels and restaurants**	**Transport and communication**	**Financial intermediation**	**Real estate**	**Public administration**	**Education**	**Health**	**Culture/Other services**	**Total**
N:	275	2,768	1,144	3,643	796	1,363	1,027	3,876	1,662	1,518	3,669	920	**22,639**
Social support colleagues (scale: 1=low - 4=high support; 4 items) [Mean]	3.28	3.17▼	3.20∇	3.28	3.28	3.20∇	3.31Δ	3.26	3.26	3,30Δ	3,33Δ	3,30Δ	**3,26**
Social support supervisor (scale: 1=low - 4=high support; 4 items	3.03▲	2.82∇	2.92	2.89	2.90	2.75▼	2.95Δ	2.90Δ	2.85	2,90	2,88	2,97Δ	**2,88**

) [Mean]													
Job control (method, order, pace autonomy) (scale: 1=low-3=high autonomy; 3 items) [Mean]	2.36 ▼	2.54Δ	2.57Δ	2.47 ∇	2.26 ▼	2.31▼	2.67▲	2.61 ▲	2.64▲	2,50	2,43∇	2,50	**2,51**
Job demand (scale: 1=low - 4= high demand; 4 items) [Mean]	2.08 ▼	2.25∇	2.31	2.24 ∇	2.41 Δ	2.27∇	2.44▲	2.34Δ	2.31	2,42 Δ	2,33	2,23∇	**2,31**
Work organisation typology (i.e. based													

on Karasek's Job Demand-Job Control Model)													
. Passive job: low job demand low job control	39.3 %▲	25.9%	25.1%	30.4 %Δ	30.6 %Δ	32.0% Δ	13.7% ▼	21. 0% ∇	18.6% ∇	19,7 %∇	25, 1%	27,5%	**24, 9 %**
. Relaxed job: low job demand high job control	22.7 %	25.2% Δ	25.8% Δ	24.1 %	12.1 %▼	18.9% ∇	27.8% Δ	26. 0% Δ	27.0% Δ	19,8 %∇	20, 3% ∇	25,1%	**23, 4 %**
. Active job: high job demand high job control	13.4 %▼	24.2%	22.7%	20.1 %∇	17.3 %∇	19.2% ∇	33.6% ▲	29. 8% Δ	29.6% Δ	26,3 %Δ	18, 9% ∇	21,9%	**23, 8 %**
· High	24.6 %	24.6% ∇	26.4%	25.5 %∇	40.0 %▲	29.9%	24.9% ∇	23. 2%	24.8% ∇	34,3 %Δ	35, 7%	25,4%	**28, 0**

strain job: high job demand low job control								∇			▲		**%**
Skill variety (scale: 1=low - 4=high variety; 3 items) [Mean]	2.44 ▼	2.58∇	2.70Δ	2.45 ▼	2.41 ▼	2.46▼	2.71Δ	2.64	2.76Δ	2.97 ▲	2.73Δ	2.79▲	**2.64**
Cognitive demands (scale: 1=low - 4=high demands; 3 items) [Mean]	2.59 ▼	2.96	2.99	2.73 ▼	2.60 ▼	3.01	3.16▲	3.03Δ	3.09Δ	3.23 ▲	3.05Δ	2.99	**2.97**

Note. Percentages are column percentages, and are tested with the Pearson Chi-square test (horizontal comparisons). Means are tested with the t-test (horizontal comparisons). The contrast is: 'subgroup' vs 'other cases'. ▲: p<0,05 (and ▼): significantly high (low) percentages and/or means, and Cohen's d Effect Size is at least 0,20. Open arrows Δ: significant, but Cohen's d Effect Size is smaller than 0,20. Cohen (1977), Statistical power analysis for the behavioral sciences, NY: Academic Press.

Source: NWCS 2009

Table 5. Changes in work organisation patterns (mean 2009 scores minus 2007 scores) by sector.

	Agriculture	Manufacturing	Construction	Wholesale and retail trade	Hotels and restaurants	Transport and communication	Financial intermediation	Real estate	Public administration	Education	Health	Culture/Other services	Total
Social support colleagues (scale: 1=low - 4=high support; 4 items) [Mean]	.14*	-.01	.01	.06*	.05	.01	.02	.04*	.01	.01	0	.02	.02*
Social support supervisor (scale: 1=low - 4=high support; 4 items) [Mean]	.17*	.02	.03	.05*	.05	-.01	.02	.01	.02	.04	.04*	.13*	.04*

Job control (method, order, pace autonomy) (scale: 1=low-3=high autonomy; 3 items) [Mean]	-.05	-.04*	-.07*	-.05*	-.09*	-.02	-.03	-.02*	-.03	-.03	-.01	-.07*	-.03*
Job demand (scale: 1=low - 4= high demand; 4 items) [Mean]	-.02	-.03	.02	-.04*	-.08*	-.01	.02	-.03*	.01	0	-.01	-.02	-.01*
Work organisation typology (i.e. based on Karasek's Job													

Demand-Job Control Model)													
. Passive job: low job demand low job control	3,9%	3,0%*	1,8%	5,7%*	9,8%*	2,2%	-1,3%	3,1%*	1,6%	2,8%*	1,5%	4,6%*	3,0%*
. Relaxed job: low job demand high job control	-2,0%	-.3%	2,4%	-.4%	-3,7%*	.7%	4,6%*	2,1%*	-2,4%	-.8%	.3%	-1,9%	.2%
. Active job: high job demand high job control	-6,4%*	-3,7%*	-5,8%*	-3,6%*	-1,8%	-1,0%	-4,6%*	-4,0%*	-2,0%	-1,4%	-2,8%*	-5,4%*	-3,2%*
. High strain job: high job	4,6%	.8%	1,5%	-1,6%	-4,2%	-1,9%	1,2%	-1,3%	2,8%	-.6%	1,0%	2,7%	.1%

demand low job control													
Skill variety (scale: 1=low - 4=high variety; 3 items) [Mean]	.04	-.08*	-.11*	-.10*	-.06	-.06*	-.08*	-.09*	-.07*	-.11*	-.08*	0	-.08*
Cognitive demands (scale: 1=low - 4=high demands; 3 items) [Mean]	-.02	-.08*	-.08*	-.15*	-.11*	-.05*	-.06*	-.06*	-.05*	-.05*	-.04*	.01	-.08*

*Note. * p < .05.*

Source: NWCS 2007, 2009

Table 6. Work organisation patterns (in 2009) by size of organisation (establishment).

	1-4 employees	5-9 employees	10-49 employees	50-99 employees	100-499 employees	500-999 employees	1000+ employees	**Total**
N:	1,293	2,079	6,158	3,228	4,848	1,331	3,139	**22,06**

								6
Social support colleagues (scale: 1=low - 4=high support; 4 items) [Mean]	3.26	3.32Δ	3.28Δ	3.24∇	3.23∇	3.28	3.27	**3.26**
Social support supervisor (scale: 1=low - 4=high support; 4 items) [Mean]	2.99Δ	2.97Δ	2.90Δ	2.85∇	2.83∇	2.90	2.86∇	**2.88**
Job control (method, order, pace autonomy) (scale: 1=low- 3=high autonomy; 3 items) [Mean]	2.61Δ	2.48∇	2.48∇	2.46∇	2.52	2.57Δ	2.56Δ	**2.51**
Job demand (scale: 1=low - 4= high demand; 4 items) [Mean]	2.11▼	2.21∇	2.30	2.33	2.33Δ	2.35Δ	2.41Δ	**2.31**
Work organisation typology (i.e. based on Karasek's Job Demand-Job Control Model)								

· Passive job: low job demand low job control	26.6%	30.6%Δ	26.6%Δ	26.6%Δ	23.2%∇	20.4%∇	18.8%∇	**24.7 %**
· Relaxed job: low job demand high job control	36.5%▲	26.2%Δ	22.2%∇	20.3%∇	23.2%	24.7%	21.8%∇	**23.4 %**
· Active job: high job demand high job control	20.1%∇	18.2%∇	21.8%∇	21.7%∇	25.7%Δ	27.8%Δ	31.2%Δ	**23.9 %**
· High strain job: high job demand low job control	16.8%▼	25.0%∇	29.5%Δ	31.5%Δ	27.9%	27.1%	28.1%	**27.9 %**
Skill variety (scale: 1=low - 4=high variety; 3 items) [Mean]	2.63	2.61	2.62∇	2.58∇	2.62∇	2.67	2.78▲	**2.64**
Cognitive demands (scale: 1=low - 4=high demands; 3 items) [Mean]	2.82▼	2.84▼	2.94∇	2.94∇	3.00Δ	3.06Δ	3.16▲	**2.98**

Note. Percentages are column percentages, and are tested with the Pearson Chi-square test (horizontal comparisons). Means are tested with the t-test (horizontal comparisons). The contrast is: 'subgroup' vs 'other cases'. ▲: p<0,05 (and ▼): significantly high (low) percentages and/or means, and Cohen's d Effect Size is at least 0,20. Open arrows Δ: significant, but Cohen's d Effect Size is smaller than 0,20. Cohen (1977), Statistical power analysis for the behavioral sciences, NY: Academic Press.

Source: NWCS 2009

3. Different forms of work organisation in relation to working condition

Table 7 presents the 2009 relationships between work organisation patterns on the one hand, and working conditions on the other. The working conditions studied concern training, health, safety and well-being; working time and work-life balance. The analyses show that the extent of skill variety and cognitive demands in the job are related to participation in in-house and external training (measured as: 'In the last two years, did you participate in in-house education or training?', and: 'In the last two years, did your company provide you paid external education or training?').

High social support from colleagues and from the supervisor are associated with better self-reported health ('In general, what do you think about your health?').

Both job control and job demands - and working in an active job - are positively related to the number of weekly working hours, and the number of hours overtime. Especially job demand, resulting in high strain jobs, and social supervisory support are positively related to emotional exhaustion.

To a lesser extent, there are also negative relationships between on the one hand social support from colleagues, job control and cognitive demands and on the other hand, emotional exhaustion. Most of these work organisation characteristics are also associated with job satisfaction ('All in all, how satisfied are you with your job?'), as does skill variety. Job demand and cognitive demands are only weakly related to job satisfaction, and negatively in the case of job demand. Cognitive demands and especially job demand are negatively related to work-family interference ('Do you miss or neglect your family activities because of your work?'). The reverse situation - family-work interference ('Do you miss or neglect your work because of family activities?') - is hardly associated with the indicators of work organisation.

Relationship work organisation and working conditions in the hotels and restaurants sector

Table 8 focuses on the existing relationship between work organisational patterns and existing working conditions for the hotels and restaurants sector – which is the most dynamic economic sector regarding organizational change as concluded in the previous section. Comparing this table with the previous Table 7, reveals that social supervisory support is more strongly related to subjective health in the hotels and restaurants sector than in the overall table of correlations. Job demands are less strongly related to subjective health. Besides, in the hotels and restaurants sector job demands are positively related to work accidents/incidents with physical/mental harm and with days of absence (Eurostat definition) (whereas this is hardly the case in the whole Dutch labour market). Also, working in a passive job (low job control, low job demand) in the hotels and restaurants sector is negatively related to work accidents. In this sector, working in a passive job is less negatively related to the number of weekly working hours too. Furthermore, social supervisory support is (weakly) negatively related to the number of hours overtime. Lastly, it turns out that working in a high strain job in the hotels and restaurants sector is less strongly related to emotional exhaustion.

Table 7. Correlations (Pearson's *r*) between work organisation patterns and working conditions (2009; *N* 20,365, minimum, to 22,534, maximum).

	In-house-training or education (1=yes; 2=no)	**External training (1=yes; 2=no)**	**Self reported, subjective, health (1=excellent = 5=poor)**	**Work accident/incident with physical/mental harm and 4 days absence (0=no; 1=yes)**	**Number of working hours/week**	•	• **exhaustion (1=never - 7=everyday)**	• **satisfaction (1=very unsatisfied - 5=very satisfied)**	• **interference (1=no, never - 4=yes, very often)**	• **interference (1=no, never - 4=yes, very often)**
Social support colleagues (scale: 1=low - 4=high support; 4 items) [Mean]	-.06	-.04	-.16	-.05	-.06	-.02	-.17	.21	-.07	-.05
Social support supervisor (scal	-.06	-.07	-.17	-.07	-.04	-.03	-.30	.33	-.14	-.06

e: 1=low - 4=high support; 4 items) [Mean]										
Job control (method, order, pace autonomy) (scale: 1=low- 3=high autonomy; 3 items) [Mean]	-.06	-.14	-.09	-.07	.18	.03	-.14	.16	-.04	.02
Job demand (scale: 1=low - 4= high demand; 4 items) [Mean]	-.08	-.07	.09	.06	.16	.23	.37	-.12	.32	.14

Work organisation typology (i.e. based on Karasek's Job Demand-Job Control Model)										
. Passive job: low job demand low job control	.06	.09	-.02	-.01	-.16	-.09	-.14	.00	-.14	-.08
. Relaxed job: low job demand high job control	.04	-.02	-.07	-.05	.00	-.12	-.20	.10	-.17	-.06
. Active job: high job dema	-.07	-.11	-.03	-.02	.19	.16	.06	.06	.14	.10

nd high job control										
. High strain job: high job demand low job control	-.03	.03	.12	.08	-.02	.05	.27	-.15	.16	.04
Skill variety (scale: 1=low - 4=high variety; 3 items) [Mean]	-.23	-.22	-.08	-.01	.22	.12	-.01	.18	.12	.06
Cognitive demands (scale: 1=low - 4=high demands; 3 items) [Mean]	-.18	-.17	.03	.01	.26	.14	.18	.05	.22	.10

** Note. Correlations greater (smaller) than (-).015 are significant at p < .05.*

Source: NWCS 2009

Table 8. Correlations (Pearson's *r*) between work organisation patterns and working conditions, in the hotels and restaurants sector (2009; *N*=699, minimum, to 790, maximum).

	In-house - training or education (1=yes; 2=no)	External training (1=yes; 2=no)	Self reported, subjective, health (1=excellent = 5=poor)	Work accident/incident with physical/ mental harm and 4 days absence (0=no; 1=yes)	Number of working hours/ week	Number of hours overtime	Emotional exhaustion (1=never-7=every day)	Job satisfaction (1=very unsatisfied - 5=very satisfied)	Work-Family interference (1=no, never - 4=yes, very often)	Family-Work interference (1=no, never - 4=yes, very often)
Social support colleagues (scale: 1=low - 4=high support; 4 items) [Mean]	.08	-.01	-.18	-.12	-.07	-.05	-.20	.24	-.05	-.05
Social support supervisor (scale: 1=low - 4=high support; 4 items) [Mean]	-.04	-.01	-.27	-.11	-.08	-.12	-.35	.37	-.20	-.08
Job control (method, order, pace	-.09	-.13	-.01	-.03	.22	-.02	-.09	.19	.03	.00

autonomy) (scale: 1=low-3=high autonomy; 3 items) [Mean]										
Job demand (scale: 1=low - 4= high demand; 4 items) [Mean]	-.04	-.04	.18	.15	.12	.28	.39	-.17	.34	.16
Work organisation typology (i.e. based on Karasek's Job Demand-Job Control Model)										
. Passive job: low job demand low job control	.02	.04	-.10	-.10	-.07	-.10	-.18	.05	-.18	-.10
. Relaxed job: low job demand high job	.03	.04	-.01	-.07	-.00	-.14	-.10	.11	-.13	-.07

control										
· Active job: high job demand high job control	-.07	-.15	.03	.01	.19	.12	.10	-.02	.16	.12
· High strain job: high job demand low job control	.02	.06	.08	.13	-.08	.09	.16	-.10	.14	.05
Skill variety (scale: 1=low - 4=high variety; 3 items) [Mean]	-.25	-.17	-.04	-.02	.23	.11	.03	.12	.17	.05
Cognitive demands (scale: 1=low - 4=high demands; 3 items) [Mean]	-.18	-.21	.04	.06	.29	.13	.19	.01	.24	.05

Note. Correlations greater (smaller) than (-).071 are significant at $p < .05$.

Source: NWCS 2009

4. Social partners' position with regard to the issue of work organisation patterns

Attitude of social partners towards importance of encouraging changes of work organisation

Since 2003, the General Employers Association (Algemene Werkgeversvereniging) and the trade unions federations have cooperated in a platform on 'Working smarter'. This cooperation was extended in 2006 in the foundation of the Dutch National Centre for Social Innovation (NCSI) (see below). Drivers for cooperation were the growth of labour productivity figures that was below average in the OECD context. Besides, there was the shared opinion that, on the one hand, productivity growth is necessary for growth of wages and, on the other hand, that there was little room for working harder (since the work load was already high).

In the public sector, the employers and trade unions had hardly any interest in this topic until 2009. Now, there are initiatives on working smarter because of the obliged cost reduction and the expected labour market shortage.

The main elements in the discussion

One central element in the discussion concerns the improvement of flexibility on the labour market. It requires renewal of labour conditions, enhancement of employability and more facilities for education and training. According to the employers, there is also a need for less state regulation on dismissals. It also requires forms of work organisations offering more autonomy, more self regulation and more responsibility. The social partners more or less agree on this. However, in practice the 'low road' to flexibility can also be observed, which offers little or no security and control for the employee, and hardly any opportunity to develop competences.

In the recent discussion on the need to increase the pension age, many (old) concepts such as management on the basis of trust and a transition from bargaining to 'co-creation' were put forward by the employers associations. Conversely, trade unions organised actions, and negotiate about self-rostering (i.e., employees schedule their own working day to meet therequirements of service delivery or production) and individualised working time arrangements.

Rather popular on both sides, however, is the concept of 'The new world of work', a concept introduced by Bill Gates. There are many interpretations, but 'working independently from time and place' is the core of the concept. This requires, of course, other forms of organising and management: more autonomy and trust, less control and an innovative organisational climate. The concept addresses several 'hot topics', such as enhancement of professional autonomy, better work-life balance and less commuting. Especially large organisations in the public and private sector practise (elements of) 'the new world of work'.

Differences in views between trade unions and employers organisations

Employers associations and trade unions differ in their view on flexibility: not all forms would benefit both the worker and the employer. Trade unions fear the damage caused by precarious work and plea for guaranteed security.

According to the employers associations, New Forms of Work ('HNW') should be accompanied by a change in wage arrangements. For example, there is no room for paid overtime if there are no '9-to-5' working days. This is an issue that is hard to discuss among trade unions and its members.

Deregulation is a point of discussion in many cases, especially deregulation on the rules that protect workers for dismissals.

There has been a debate on the pension age. In the end, the social partners at the national level agreed upon the raise of the pension age from 65 to 66 years.

Initiative supporting changes in work organisation: the NCSI

The NCSI was established as a foundation in 2006. The former national 'Innovation platform' brought together the platform for 'Working smarter' (see above) of employers associations and trade unions together with three (applied) research institutions - the universities of Rotterdam and Amsterdam and TNO - with knowledge on new forms of work organisation, new forms of management and new forms of labour relations.

The mission of the NCSI is to spread knowledge, ideas and good practices on social innovation and to stimulate action and experiments on the topic. Social innovation is defined as: renewal of work organisation and labour relations with the aim of improving the organisation's performance (vitality, productivity, quality and innovativeness), as well as the development of workers' talents and fun at work.

Commentary by the NC

With regard to the main results on trends, it should be noted that the trend comprises only a restricted number of years. These years (2007, 2008 and 2009) were characterised by a major financial and economic crisis. As supported by the results of this study, such crises may affect work organisation. Additionally, crises may influence especially specific sectors, such as the hotels and restaurants sector - distinguished here as one of the most dynamic sectors in terms of work organisational change. Lastly, there is a need for trend data at the firm/establishment level concerning the prevalence of work organisation practices.

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