



# Education sector: Working conditions and job quality

'Work plays a significant role in people's lives, in the functioning of companies and in society at large. But what is work? How can we describe it? Is it changing, and if so, is it for better or for worse? Is it fulfilling the numerous and at times conflicting expectations we have of it? How can we take steps to improve work for the well-being of all?'





This report gives an overview of working conditions, job quality, workers' health and job sustainability in the education sector (NACE 85). It is based mostly on the fifth European Working Conditions Survey (EWCS), which gathers data on working conditions and the quality of work across 34 European countries. Additional information on the structural characteristics of the sector is derived from Eurostat data. The sector includes all educational activities: pre-primary, primary, secondary and higher education, as well as other educational activities and educational support activities. The fifth EWCS contains responses from 3,157 workers in this sector. The report compares aspects of work in the sector with the EU28 as a whole.

#### Structural characteristics

In 2010, 16,031,900 European workers worked in the education sector, 7.4% of the EU28 workforce (Eurostat, 2013). Employment in the sector increased by 3.4 percentage points between 2008 and 2010, and by a further 0.5 percentage points between 2010 and 2012 (Eurostat, 2013).

Countries where the education sector is a relatively large employer are Latvia (where it employs 10.4% of the workforce), the United Kingdom (10.6%), Sweden (10.8%) and Lithuania (11.6%). The sector has less prominence in Bulgaria (employing 6.0% of the workforce), the Czech Republic (6.0%), Croatia (5.9%) and Romania (4.2%) (Eurostat, 2013). A large proportion of workers in education (74.0%) work in small and medium-sized workplaces (10–249 employees), compared to 46% in the EU28. Consequently, workers in micro-workplaces (1–9 employees) and large workplaces (250 employees and over), where they make up 20% and 7%

respectively of the workforce, are relatively underrepresented in the sector in comparison to the EU28, where the figures are 42% and 12% respectively.

The sector is female-dominated: 72% of workers are women and 28% are men (Eurostat, 2013). Young workers (below 25 years of age) and workers aged between 25 and 39 are relatively underrepresented in the sector, as they make up 5% and 34% respectively of the sector's workforce, compared to 9% and 36% in the EU28 as a whole. On the other hand, older workers (50 years and over) make up a larger-than-average proportion of the workforce (33% compared to 27% in the EU28).

Indefinite contracts are the predominant form of employment in education (81% of the workforce), but fixed-term contracts are more common in the sector (14%) than in the EU28 (12%) (Figure 1). Working without a formal contract, on the other hand, is less common than in the EU28.

Part-time work is considerably more prevalent in the education sector than in the EU28, with 56% of women and 40% of men in the sector working 34

### **Education sector in a nutshell**

- The sector is female-dominated
- Almost one-third of women working in microworkplaces would prefer to work more hours
- Workers receive a high level of employer-paid training
- A relatively large proportion of workers report being under-skilled
- Earnings are lower when compared with earnings of workers with similar profiles in other sectors
- Levels of job strain are relatively low
- Presenteeism (working when sick) in the sector should be addressed

Nomenclature statistique des activités économiques dans la Communauté européenne (statistical classification of economic activities in the European Community).

Figure 1: Employment status, by gender



hours or less, compared to 38% of women and 13% of men in the EU28. Self-employment is not very prevalent, with only 4% reporting they are self-employed without employees and 1% reporting they are self-employed with employees, compared to 11% and 4% respectively in the EU28.

## Working conditions

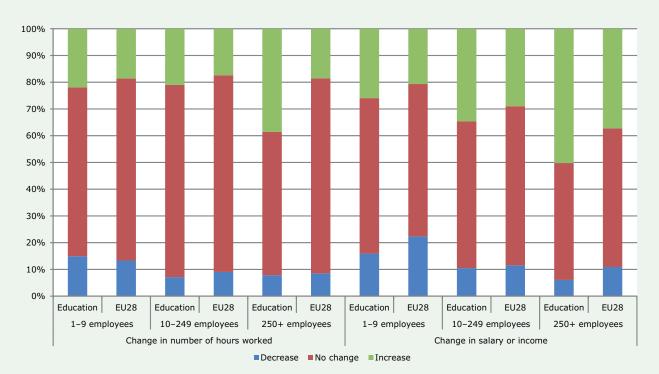
## Changes since the crisis

Figure 2 shows that workers in the education sector were more likely to report changes in their working hours in the year prior to the survey than workers in the EU28 as a whole. Across all workplace sizes, the proportion of workers reporting no changes to their working hours was lower than in equivalent workplaces in the EU28, while the proportion of workers reporting an increase in working hours was higher than in the equivalent EU28 workplaces.

Workers in micro-workplaces were most affected by working hours reductions, with 15% reporting decreased working time, while workers in large workplaces were most likely to have experienced an increase in their working hours (reported by 39% of the workforce in large workplaces).

Both in the education sector and in the EU28 in general, workers more frequently reported changes in salary or income than changes in hours worked in the year prior to the survey. Employees in microworkplaces more frequently reported wage cuts than those in small and medium-sized workplaces and large workplaces. Across all workplace sizes, however, the proportion of employees reporting a decrease in salary is smaller than the proportion reporting an increase, and smaller than in the equivalent EU28 workplaces. Conversely, across all workplace sizes in education, the proportion of employees reporting an increase in salary (26% in

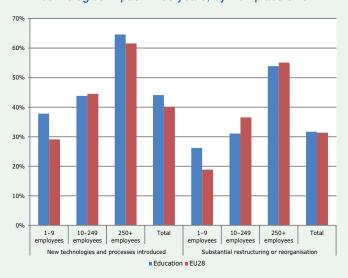
Figure 2: Percentage of employees reporting changes in number of hours worked and salary or income in past year, by workplace size



micro-workplaces, 35% in small and medium-sized workplaces and 50% in large workplaces) is higher than in the equivalent EU28 workplaces (21%, 29% and 37% respectively).

Workers in education were slightly more likely to report the introduction of new technologies and processes in the three years prior to the survey than workers in the EU28 as a whole. Overall, the sector does not differ from the EU28 average in the reported incidence of restructuring and reorganisation (Figure 3). The education sector follows the same pattern as the EU28: the share of employees reporting restructuring or reorganisation or the introduction of new production processes and technologies increases with workplace size.

Figure 3: Restructuring and introduction of new technologies in past three years, by workplace size



However, the share of reported changes (for both new technologies and restructuring) in the sector was larger than in the EU28 for micro-workplaces, but smaller for small and medium-sized workplaces. Workers in large workplaces in education were more likely to report changes in technology and processes but less likely to report restructuring or reorganisation than their EU28 counterparts.

#### Working time and work-life balance

Workers in education work 31 hours on average per week, compared to 38 hours in the EU28. As in the EU28, men in the education sector tend to work more hours than women, independent of workplace size (Figure 4). In education, both women and men employed in large workplaces report the highest working hours. While women's average working hours increase proportionally in relation to workplace size, for men they are highest in large workplaces and lowest in small and medium-sized workplaces.

1-9 employees

250+ employees

1-9 employees

250+ employees

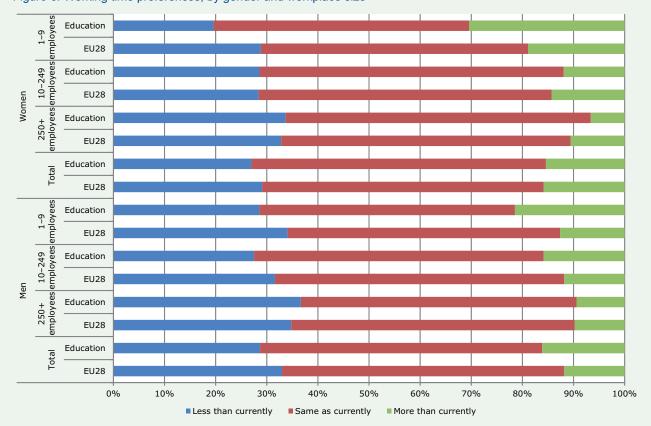
250+ employees

0 5 10 15 20 25 30 35 40 45

■Education ■EU28

Figure 4: Average working hours, by gender

Figure 5: Working time preferences, by gender and workplace size



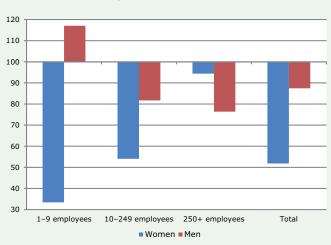
The preferences of workers in education with regard to their working time do not differ much from those of workers in the EU28 as a whole. Overall, 57% of workers in education say they would prefer to work the same number of hours as currently, compared to 55% in the EU28, while the proportion of those expressing a preference for working less than currently is slightly lower (28% in the sector compared to 31% in the EU28 as a whole).

Across all workplace sizes, the proportion of workers who would prefer to work fewer hours than currently is higher than that of workers who would prefer to work more hours, with the exception of women working in micro-workplaces, among whom the share of those who would prefer to work more hours than currently (31%) is higher than the corresponding EU28 average (19%) and also higher than the share of those who would prefer to decrease their working hours (20%).

It is interesting to note that, overall, the proportion of women in the education sector who would prefer to work more hours does not differ from the corresponding EU28 average (15%), while that of men (16%) is higher than for the EU28 (12%).

Figure 6 shows that working atypical hours (weekends, evenings or nights) is less common in education than in the EU28 as a whole, especially for women. The same pattern holds across all workplace sizes in the education sector, with the exception of men working in micro-workplaces, who are more likely to work atypical hours than the EU28 average.

Figure 6: Index of working atypical hours (EU28=100), by gender and workplace size



When looking at the regularity of working time (working the same number of hours every day and the same number of days every week), large differences exist across genders and workplace sizes in the education sector compared to the EU28 (Figure 7). In the sector as a whole, women are more likely than the EU28 average to have regular working hours, while the opposite is true for men. This pattern does not apply, however, for large workplaces where both men and women have on average less regular working hours than the EU28 average. More men in microworkplaces report irregular working hours than all other groups of workers in the sector.

Figure 7: Index of regularity of working time, by gender and workplace size

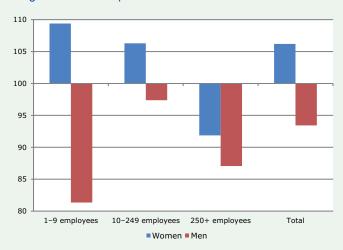
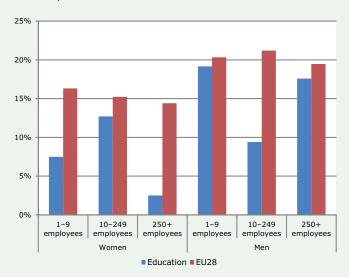


Figure 8 shows that work-life balance (the fit between working hours and family or social commitments) is better for those working in the education sector than in the EU28 as a whole. However, the differences in the proportion of workers reporting a poor work-life balance are small for women in small and medium-size workplaces and for men in micro workplaces and large workplaces.

Figure 8: Poor work–life balance, by gender and workplace size



# Work organisation

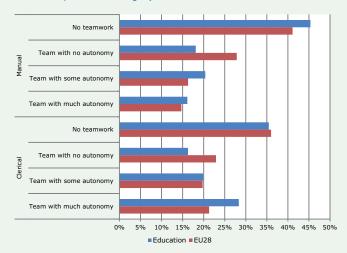
### Teamwork

Teamwork has been proposed as an alternative to work organisation models based on high levels of labour division. As teamwork reflects a variety of practices, it can also assume a variety of forms. Different types of teamwork can be identified using the EWCS by looking at the level of autonomy within the teams.

Overall, teamwork is equally prevalent in the education sector as in the EU28 as a whole, with 64% of the education workforce working in a team of some kind, compared to 63% in the EU28 (Figure 9). There are, however, differences between occupations in the sector, as workers in manual occupations are considerably less likely than workers in clerical

occupations to work as part of a team. Teamwork with some autonomy is the most common form of teamwork among manual workers in education, and more common than for manual workers in the EU28 as a whole; a higher-than-average share of clerical workers in the sector, on the other hand, report that they work in a team with much autonomy.

Figure 9: Teamwork and team autonomy, by occupational category



#### Task rotation

Task rotation is also an important feature of work organisation. Depending on how it is implemented, task rotation may require different skills from the worker ('multiskilling') or may not ('fixed task rotation') and is either controlled by management or by the workers themselves ('autonomous'). Task rotation has been shown to be beneficial for workers' well-being, and autonomous multiskilling systems, in particular, are associated with greater worker motivation as well as better company performance.

The percentage of workers in education working in a task rotation system (42%) is lower than in the EU28 as a whole (47%). The difference is particularly marked in small and medium-sized workplaces and large workplaces in the sector, in which the proportion of workers who report not working in any task rotation system (respectively 57% and 62%) is considerably higher than in the corresponding EU28 workplace sizes (50% and 53%) (Figure 10).

In contrast to the EU28, the prevalence of task rotation in education actually decreases as workplace size increases. Management-controlled multiskilling is the most common form of teamwork across all workplace sizes, but both micro-workplaces and small and medium-sized workplaces in education are characterised by an above-average incidence of autonomous multiskilling in comparison to similar workplaces in the EU28. Large workplaces in education also stand out for the higher-than-average incidence of autonomous fixed task rotation, reported by 6% of the workforce in comparison to only 3% in similar workplaces in the EU28.

#### Female bosses

As education is a female-dominated sector, it is perhaps unsurprising that the proportion of workers who report having a female boss (51%) is considerably higher than the EU28 average (28%). Both the proportion of women (60%) and men (32%) working in education who report having a female boss is higher than the corresponding EU28 averages of 47% and 12% respectively. However, the proportion of workers with a female boss (51%) is still well below the proportion of female workers (72%) in the sector.

## Skills and training

■ Management-controlled multiskilling

Overall, the majority of workers in education say that their present skills correspond well with their duties (Figure 11). Across all age groups, however, workers

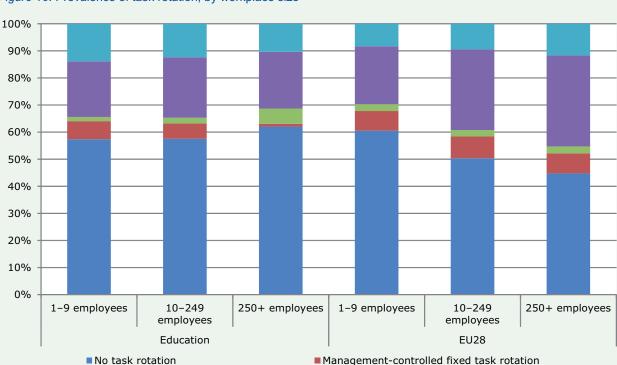
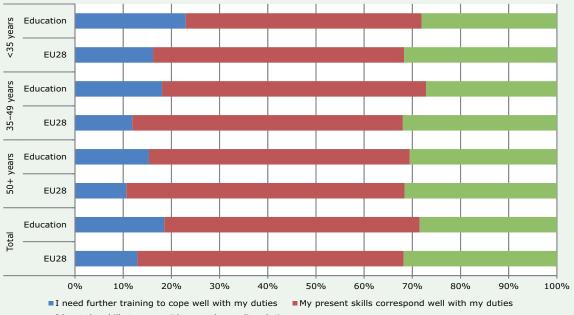


Figure 10: Prevalence of task rotation, by workplace size

Autonomous fixed task rotation

Autonomous multiskilling

Figure 11: Match between skills and tasks, by age

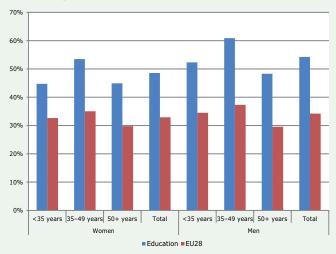


■I have the skills to cope with more demanding duties

in education are considerably more likely to say they are 'under-skilled' than workers in the EU28 as a whole and less likely to be 'over-skilled' – although a higher proportion of workers say they are over-skilled than under-skilled across all age groups. Young workers in education are most likely to be under-skilled, while older workers (above the age of 50) are most likely to be over-skilled for their current duties.

The percentage of workers in education who report they have received training provided or paid for by their employer is considerably higher than in the EU28 for both women and men across all age groups (Figure 12). In each age group, however, men more often receive employer-paid training than their female counterparts.

Figure 12: Employer-paid training, by gender and age

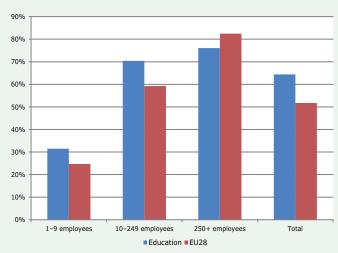


#### **Employee representation**

The EWCS contains limited information on formal employee representation. It asks whether an employee representative is present in the workplace and whether workers have raised an issue with an employee representative in the past year. Figure 13

shows the combined results of these questions (an employee representative has been considered to be available if they are present in the workplace or when an issue was raised).

Figure 13: Availability of an employee representative at the workplace, by workplace size



In 2010, 64% of employees in education reported that an employee representative was available compared to 52% of workers in the EU28. As is the case in the EU28, the more workers employed in the workplace, the higher the probability of having an employee representative – although the percentage of workers in large workplaces in education who said that an employee representative was available is lower than the EU28 average for large workplaces.

#### Psychosocial and physical environment

#### Job autonomy and work intensity

The psychosocial and physical environment has a substantial impact on workers' well-being. According to the job demand and control model of the American sociologist Karasek (1979), workers are more likely to suffer from work-related stress when they are faced

80 **EU** median Low strain **Active** Work intensity LE: Men 35-49 years 75 SE: Men LE: Men 35-49 years <35 years LE: Women LE: Men 35-49 years 50+ years 70 Job autonomy 65 SE: Women SE: Men ▲ 50+ years 50+ years **EU** median SE: Women SE: Women Job autonomy <35 years 35-49 years 60 LE: Women 50+ years SE: Men <35 years 55 **Passive** Job strain 50 30 40 20 25 35 45 Work intensity

Figure 14: Distribution of groups of workers by average levels of job autonomy and work intensity

Note: LE = large enterprise; SE = micro, small or medium-sized enterprise

with a high level of demand while being limited in the control they have over the way in which they carry out their job.

Figure 14 shows the likelihood of workers in education suffering from work-related stress. Groups of workers are plotted along two axes: job autonomy and work intensity.

Overall, the education sector is characterised by below-average levels of work intensity, as the vast majority of workers tend to fall in the quadrants on the left hand side of the graph, below the EU28 median for work intensity. The bottom left quadrant in Figure 14 contains the averages for men under the age of 35 working in micro, small and medium-sized workplaces, as well as for women aged 50 and over in large workplaces. These groups of workers are likely to be in 'passive' jobs, characterised by low levels of intensity and low levels of autonomy. The risk of stress is low in these jobs, but there are risks of frustration and low motivation as the jobs lack challenge, and workers have little control over what they do and how they do it.

Most group averages fall within the 'low strain' quadrant: men under 35 in large workplaces; men aged 35 and over in micro, small and medium-sized workplaces; women 50 years and over in micro, small and medium-sized workplaces; and women aged 35–49 in large workplaces. Women under 35 in smaller workplaces are on the boundary of this 'low strain' quadrant and the 'passive' quadrant. Men over 50 in large workplace are on the boundary of this 'low strain' and the 'active' quadrant. Low strain jobs are characterised by relatively low levels of work intensity and high levels of job autonomy. They pose a low risk

of stress, but workers are less likely to suffer from frustration and loss of motivation than those in passive jobs. They might, however, not be challenged to realise their full potential.

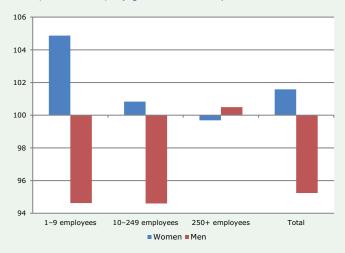
The top right quadrant contains the average for men aged 35–49 years in large workplaces. These workers tend to be in 'active' jobs, with high levels of work intensity and high levels of job autonomy. The average for men above 50 in large establishments falls on the boundary between low-strain and active jobs. Although their jobs can be very demanding, workers in the active quadrant have enough control over the way they do their job and can develop coping strategies through active learning.

The most problematic category is 'job strain' in the bottom right quadrant, which is empty in the education sector. The jobs of workers in this category are characterised by high levels of intensity and low levels of autonomy, posing the risk of unhealthy stress levels and unresolved strain, and consequently a range of stress-related illnesses such as cardiovascular disease and mental health problems.

#### Social environment

A good social environment is characterised by the existence of social support and the absence of abuse at work. Social support can help workers deal with high levels of work intensity. Gender differences emerge among workers in education for this indicator (Figure 15). In micro-workplaces, women have an above-average score for good social environment, while men score below the EU average in both micro-workplaces and small and medium-sized workplaces. No substantial differences between the sector and the EU28 are found for men and women in large workplaces.

Figure 15: Index of good social environment (EU28 = 100), by gender and workplace size

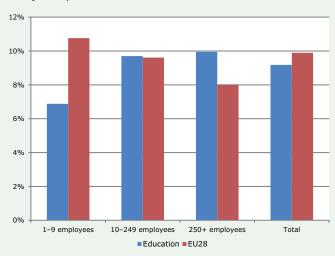


## Physical risks

Exposure to ambient risk is the most prevalent physical risk in education as a whole (Figure 16). Overall, however, levels of exposure to physical risks in the sector are considerably lower than in the EU28. There are, however, differences between workers in manual and clerical occupations. Women working in manual occupations in education report considerably higher levels of exposure to posture- and movement-related and biological and chemical risks than average. On the other hand, both women and men in clerical occupations have lower-than-average levels of exposure to all risk types.

In the sector as a whole, 9% of workers report they were not very well or not at all well informed about workplace risks, compared to 10% in the EU28 (Figure 17). When looking at workplace size, the proportion of workers in education reporting that they are not very well or not at all well informed is shown to increase with workplace size, which is the opposite pattern to workers in the EU28 as a whole.

Figure 17: Not very well or not at all well informed about health and safety risks at work, by workplace size



# Job quality

In the report *Trends in job quality in Europe*, the authors constructed four indices of job quality: earnings, prospects, intrinsic job quality and working time quality. The indices are built using job characteristics that are unambiguously associated with workers' well-being.

Figure 18 summarises job quality in the education sector. It shows the average score for the sector on each of the indicators, with and without controlling for the structural characteristics of the sector's workers (age, gender, workplace size, education level and country), and for the EU28.

Job quality in the education sector is slightly higher than in the EU28 as a whole, as workers in the sector tend to have higher-than-average earnings, better working time quality, greater intrinsic job quality and better prospects. However, when controlling for



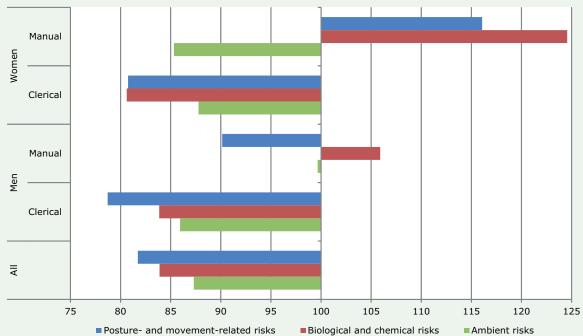
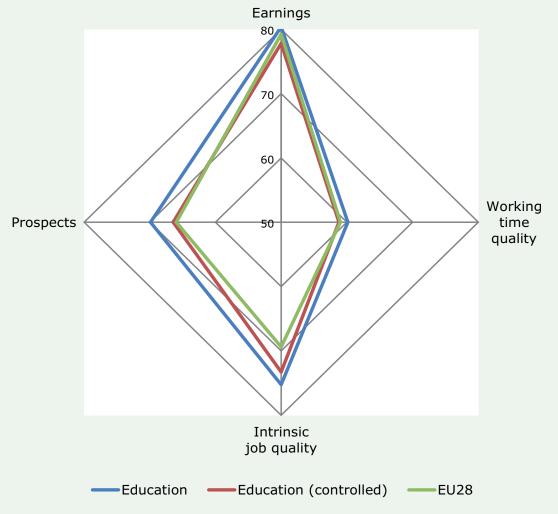


Figure 18: Job quality in the human health sector compared with EU28



Note: Scores on all four indicators range from 0 to 100

structural characteristics of the workforce, all of these differences are reduced, with the earnings score for the education sector actually falling below the EU28 average — suggesting that in terms of earnings workers in education are actually worse off than workers with similar profiles and characteristics in other sectors. The difference between the sector and the EU28 with regard to intrinsic job quality remains significantly positive, while the differences observed in working time quality and prospects are no longer statistically significant when controlling for structural characteristics. The higher-than-average level of educational attainment of the workforce in education is the strongest predictor for the higher observed scores in these two indicators.

# Health and sustainability of work

Working conditions can have both a positive and a negative impact on the health of workers and on the sustainability of their jobs.

Figure 19 shows that the education sector compares quite favourably with the EU28 in health and job sustainability outcomes. The proportion of workers who have been absent due to a work accident, who have poor self-reported health, who declare that their health is at risk because of work and that work affects

their health negatively is lower in the education sector than in the EU28. The share of workers who think they will be able to do their job at 60 is also higher in the sector than in the EU28. Levels of presenteeism (having worked when sick) reported by education workers, however, are higher in comparison to the EU28 average.

When controlling for the structural characteristics of the workforce in the sector (gender, age, education, workplace size and country), the differences between the sector and the EU28 in the lower likelihood of education workers to declare that work affects their health negatively and that their health is at risk because of work remain statistically significant. The same is true for the greater likelihood of workers in education to report that they have worked when sick - suggesting that presenteeism is an issue that needs to be addressed in the sector. On the other hand, the positive differences between the sector and the EU28 in relation to poor self-reported health, absence due to work accident and ability to do one's job at 60 are not statistically significant when controlling for structural characteristics. They seem instead to be explained by the country distribution of the workforce in the education sector and by the higher-thanaverage level of education of the sector's workforce.

Figure 19: Health and sustainability of work

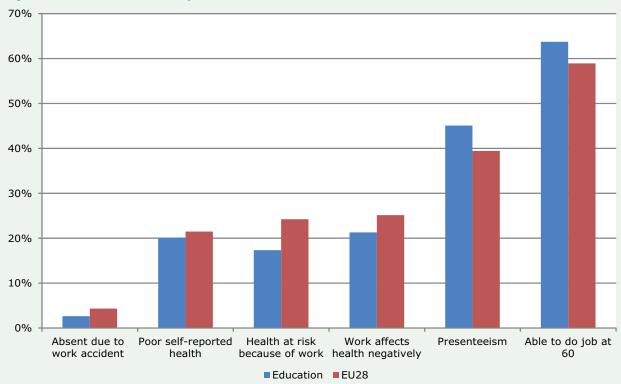
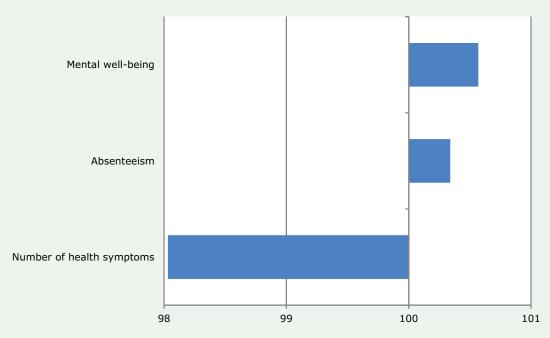


Figure 20 again shows that workers in the education sector do not differ much from the EU28 average in the reported number of health symptoms, mental wellbeing score, and level of absenteeism. However, when including gender, age, education, workplace size and the country distribution of the workforce in the model, education workers are found to have a slightly better mental well-being than workers in the EU28. This suggests that given the profile of workers in education – particularly given the large proportion of women and the relatively high level of education –

workers in education have a relatively good mental well-being.

It is important to keep in mind that the impact of work on health is a very gradual process that can take a long time and cannot be fully captured in a cross-sectional survey. The results in this section are likely to underestimate the often negative health effects that physically and psychologically strenuous working conditions can have.

Figure 20: Indices of health symptoms, mental well-being and absenteeism (EU28 = 100)



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## **European Working Conditions Survey**

Eurofound developed its European Working Conditions Survey (EWCS) in 1990 in order to provide high-quality information on living and working conditions in Europe. Five waves of the survey have been carried out to date, enabling long-term trends to be observed and analysed.

The EWCS interviews both employees and self-employed people on key issues related to their work and employment. Fieldwork for the fifth EWCS took place from January to June 2010, with almost 44,000 workers interviewed in their homes in 34 countries – EU28, Norway, the former Yugoslav Republic of Macedonia, Turkey, Albania, Montenegro and Kosovo. The 5th EWCS was implemented by Gallup Europe, who worked within a strong quality assurance framework to ensure the highest possible standards in all data collection and editing processes.

The questionnaire covered issues such as precarious employment, leadership styles and worker participation as well as the general job context, working time, work organisation, pay, work-related health risks, cognitive and psychosocial factors, work-life balance and access to training. A number of questions were included to capture the impact of the economic downturn on working conditions.

For more information on the EWCS, see http://www.eurofound.europa.eu/surveys/ewcs/index.htm

#### **Sectoral analysis**

The report *Working conditions and job quality: Comparing sectors in Europe* and the series of 33 sectoral information sheets aim to capture the diversity prevalent across sectors in Europe in terms of working conditions and job quality. The report pinpoints trends across sectors in areas such as working time and work–life balance, work organisation, skills and training, employee representation and the psychosocial and physical environment. It identifies sectors that score particularly well or particularly poorly in terms of job quality and sheds light on differences between sectors in terms of health and well-being.

For more information, see http://www.eurofound.europa.eu/surveys/ewcs/2010/sectorprofiles.htm

#### **Further information**

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