4.5 Quality of Employment and Well-Being
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The Policy Challenge
Early retirement from regular employment provides a major challenge to social and health policy in European countries (Brugiavini 2001). As people over 60 years old will comprise up to one third of the population in several European countries in the next two decades, a shrinking number of economically active people will have to support a growing number of economically dependent elderly people. Currently, large variations in workforce participation rates are observed across European countries, e.g. in the age group 55-59. In recent years, this rate has fallen to below 20 per cent in Belgium, Italy, France and the Netherlands, to about 35 per cent in Germany and to 40 per cent in Spain, whereas this percentage is much higher in countries like Switzerland, Norway, Japan and the United States.

Therefore, a major policy challenge consists in increasing the number of regularly employed people at older age by influencing the determinants of early retirement. At least three types of determinants have been identified. First, financial incentives, often in combination with economic pressure from employers, pension schemes with extended eligibility and alternative income options need to be mentioned. National policies vary quite substantially with respect to these regulations. Secondly, poor health, chronic illness and disability are important determinants of early exit from the labour market. This holds particularly true for occupations where working conditions cannot be modified or adjusted to a reduced work ability of employees. Poor quality of work and employment is a third determinant of premature departure from working life. Today, this is not only the case for jobs with high ergonomic exposures and high physical work load. Rather, stressful working conditions, e.g. in terms of high work pressure, monotonous jobs, poor incentives and elevated job instability influence employees' decision to depart from jobs as early as they can (Mein et al. 2000).

Importantly, these stressful working conditions also contribute to poor health and to the development of chronic illness, i.e. to conditions that in turn influence early retirement (Ostry et al. 2003, Schnall et al. 2000). Thus, poor quality of employment exerts both direct and indirect effects on premature retirement. Given its importance, quality of work and employment seems to be a prominent target of policy interventions as its improvement may result in increased work ability and longer maintenance of regular employment.

Although poor quality of work has been monitored across Europe in a previous panel survey (Paoli and Merlič 2001) no investigation has yet compared this topic in terms of two major theoretical concepts of health-related stressful employment, the demand-control model (Karasek et al. 1998), and the effort-reward imbalance model (Siegrist et al. 2004). The former model identifies stressful work by job task profiles characterised by high demand in combination with low control (low decision latitude), whereas the latter model claims that an imbalance between high efforts spent and low rewards received in turn (money, esteem, career prospects, job security) adversely affects health. Moreover, no comparative data so far exist on associations between stressful work and the health. In both instances, the SHARE investigation is the first one to explore these topics at an European level.

In this contribution we therefore present release 0 data from SHARE to answer the following questions:


- What is the prevalence of poor quality of employment – in terms of the two theoretical models – in the ten European countries? Can we observe a specific pattern of distribution, e.g. in terms of a North-South gradient?

- To what extent does poor quality of work vary according to major socio-demographic and socio-economic factors?

- Is poor quality of work and employment associated with reduced well-being, as measured by poor self-rated health and depression?

**Quality of Employment Across Europe: The North-South Gradient**

To measure health-related stressfull work a short battery of items derived from the job content questionnaire measuring the demand-control model (Karasek et al. 1998) and from the questionnaire measuring the effort-reward imbalance model (Siegrist et al. 2004) was included in the SHARE interview. Items were selected on the basis of factor loadings on respective original scales. With regard to the first model, we restricted the measurement to the control dimension as this dimension proofed to be of particularly high predictive power in a number of studies (Karasek et al. 1998, Ostry et al. 2003, Schnall et al. 2000). Low control at work and high effort at work were measured by two items each whereas low reward was measured by five items. In this study, low quality of work in terms of low task control was defined by scoring high on the two respective Likert-scaled items (mean score \( > 4.5 \); range 2 to 8), whereas medium quality of work was defined by mean scores ranging from 4.0 to 4.5. Scores below 4.0 indicate a high degree of control at work. For within-countries analyses upper tertiles of scores were calculated for each country separately where low control at work was defined by scores in the upper tertile.

Effort-reward imbalance at work was defined by a ratio of the sum score of 'effort' items in the nominator and of the adjusted sum score of 'reward' items in the denominator. Values greater than 1.0 were defined as indicating an imbalance between high effort and low reward, whereas values equal to or lower than 1.0 were defined as indicating a balanced state, i.e. no stressful work experience in terms of this model. Countries with more than 50% of all respondents exhibiting effort-reward imbalance (>1.0) were considered as exposing workers to very poor quality of employment. Similarly, if the percentage ranged between 40 and 50, quality of work was considered to be poor. In countries with a percentage of imbalance ranging from 30 to 40 the quality of work was considered to be medium or fair whereas countries with a prevalence below 30 per cent were considered as exposing people to an overall high quality of work.

The data of this analysis are restricted to the subgroup of the SHARE baseline sample who was still in regular employment or self-employed at the time of the interview \((n=6,727)\). The age range of respondents was 50 to 65.
The prevalence of levels of quality of work across the ten European countries is given in Figures 1 and 2. Figure 1 indicates country-specific levels of quality of work in terms of the effort-reward imbalance model. Very poor quality of employment is present in Greece and in Italy. In Spain, Germany and Austria, overall quality of work is still rather poor, whereas it is fair in France, Denmark and Sweden. Two countries show high overall quality of work, Netherlands and Switzerland.

A similar, although not identical picture emerges from Figure 2 where the core dimension of the demand-control model, task control, is analysed. Lowest overall levels of task control at work are found in Greece and in Spain, a medium or fair level of control is ob-
served in Italy, France, Germany and Austria, and relatively highest prevalence of work-related control is obvious from data in Sweden, Denmark, the Netherlands and Switzerland.

Taken together these two indicators give some evidence of a North-South gradient of quality of employment in Europe with highest quality in northern countries (Denmark, Sweden, Netherlands) and in Switzerland, medium quality in western countries, especially France, Germany and Austria, and poorest quality in Greece, Italy and Spain.

Answers to the second question are given in Tables 4A.17 and 4A.18 (see the Appendix to this chapter) where the prevalence of low quality of work is stratified according to gender, age and socio-economic status (level of education) for each country. With regard to effort-reward imbalance, low quality of work is significantly more prevalent among employees with low education in some, but not all countries (Sweden, Italy, Greece, Spain).
No consistent gender differences are found, and differences between the three age groups (<55, 55 – 59, ≥ 60) are not consistent either. However, this latter finding may be mainly due to the fact that the oldest group exhibits higher quality of work compared to the two younger groups (significant differences in three countries). This latter observation can be explained by a ‘healthy worker’ effect, indicating a higher probability of continued employment up to pension age among people who are employed in more privileged jobs (see Table 4A.17).

When comparing these differences in quality of work with respect to task control, a slightly different situation appears (Table 4A.18). In this case, low education is associated with low quality of employment in a much more consistent way, if compared to the former model. Here, significant differences are found in all ten countries. On the other hand, the ‘healthy worker effect’ is less obvious as no significant difference in the expected direction is found. To the contrary, the prevalence of low job control is significantly higher among the oldest group in at least one country (Denmark). With regard to gender, there is a slight tendency of poorer quality of work among women, compared to men (see Table 4A.18).

Given these variations between countries it is unlikely that the overall North-South gradient in quality of work is explained to a substantial degree by the socio-demographic and socio-economic variables under study. Yet, multivariate analyses will give a quantitative estimate of their contribution.

**Strong Association Between Quality of Employment and Well-Being**

The third question concerns the frequency and strength of associations between quality of employment and well-being, as measured by level of self-rated health and presence/absence of depression. Self-rated health was assessed by a widely used Likert-scaled one-item indicator measuring one's overall current state of health. Answers were dichotomised into good health (good or better) and poor health (less than good). The definition of depression was based on a clinically validated score of the EURO-D scale of depression. Again dichotomised information (depression present versus absent) (for details see Contribution 3.5).

As indicated in Tables 4A.19 and 4A.20 (see Appendix to this chapter), strong associations are evident between quality of employment and the two indicators of well-being. For instance, among employed and self-employed people with poor health, a higher percentage is characterised by an imbalance between high effort and low reward, compared to people with good health. This difference is statistically significant in all ten countries. A similar, but somewhat weaker trend is found for low control at work (statistically significant differences in eight countries). With respect to depression, significant differences in the expected direction are observed for both indicators of poor quality of employment in five countries. Largest differences in percentage of low quality of work between those with and without depression (>20%) are evident from Germany, Denmark, Switzerland and France (Tables 4A.19 and 4A.20).

In summary, in a majority of European countries under study significant associations do exist between reported poor quality of employment, as measured by effort-reward imbalance and low work control, and reduced well-being, as measured by poor self-rated health and depression. These results are consistent with an impressive body of empirical findings from single countries where additional statistical adjustments for confounder control were made (for review Marmot and Siegrist 2004). Despite their robustness any interpretation of the current findings must take into account the cross-sectional study design from which
they originate. Both types of measures were based on self-reports and were assessed at one single occasion, the comprehensive SHARE baseline interview. Therefore, it cannot be excluded that part of the reported association is due to 'common method variance'.

This is one of the strong arguments in favour of conducting a follow-up study of the SHARE sample. A prospective study design would enable us to test a causal association between quality of work at baseline and reduced well-being at follow-up. Moreover, the direct and indirect effects of low quality of employment and poor health on early retirement could be estimated in a follow-up study as substantial number of employees of this age group is expected to retire during a observation period of several years. In view of the policy implications of such findings which would be available for the first time at the European level, a longitudinal analysis of SHARE is considered a high priority task.

Conclusions

In this contribution, release 0 data from the baseline SHARE investigation were used to answer three questions that are relevant for an improved understanding of the reasons of early retirement from work in European countries. First, as poor quality of employment has been found to influence premature departure from working life, it was of interest to know how large the proportion of employed and self-employed people in different countries is that is characterised by low quality of employment. We used two theory-based indicators of quality of employment, the degree of task control and the mismatch between high efforts spent and low rewards received in turn. Substantial variations were found across Europe, with clear indication of a North-South gradient where quality of work was higher in northern and lower in southern European countries. Although it is premature to explain this gradient it might well be that, overall, occupational health and safety standards are more developed and more often applied in northern European countries and that quality of work has become a topic of explicit policy concern more often there.

Secondly, we were interested in knowing to what extent poor quality of employment varies according to major socio-demographic and socio-economic factors across the ten countries under study where gender, age and level of education were explored. In almost all countries low level of education was found to be associated with poor quality of work. Similar findings resulted from analysis based on additional socio-economic indicators, income and occupational position (not reported in detail). Associations with age and gender were less consistent. Although results of multivariate analyses are not yet available it is unlikely that socio-demographic and socio-economic factors can explain the reported North-South gradient in quality of work to a substantial extent.

The third question concerned the link between quality of employment and well-being. Respective evidence is important in view of the direct and indirect effects on early retirement produced by stressful working conditions. In fact, substantial associations were found in a majority of countries for both indicators of reduced well-being, poor self-rated health and depression.

In conclusion, the essential findings are as follows:

- Quality of employment (low control at work, mismatch between high effort and low reward) varies considerably across European countries, with a clear North-South gradient (relatively high in Nordic countries, Switzerland and Netherlands; relatively low in Spain, Italy and Greece).
Quality of employment is strongly associated with socio-economic status (educational degree) in almost all European countries: better quality of employment goes along with better education.

Quality of employment is strongly associated with well-being in all European countries: lower quality of employment goes along with higher prevalence of poor self-rated health and depression.

Although further evidence derived from longitudinal data is warranted these first results support the conclusion that policy efforts at country level and at the European level need to be strengthened that aim at improving the quality of employment. This aim can be reached by enlarging the amount of control and autonomy at work and by matching efforts required from working people with rewards provided to them. In this latter case, measures include non-monetary gratifications as well as improved opportunities of job promotion, qualifications and job security. Creating a healthy older work force in Europe remains a policy goal of high priority.

References