

Chapter 6

Methodological issues

This chapter discusses how information on the quality of the working environment should be collected. It reviews the role of data sourced from surveys and administrative records as well as from surveys of workers and employers. It notes the importance of collecting data that cover the characteristics of both jobs and workers and that are relevant to employees and self-employed workers. The chapter also reviews evidence on the impact of survey modes and the interview sites on the quality of data on the working environment collected through surveys. The chapter draws on state-of-the-art methodologies adopted by national and international initiatives such as the European Working Conditions Survey, the British Skills and Employment Surveys and the French Enquête Conditions de Travail to discuss the various issues that should be considered when designing a questionnaire to assess the quality of the working environment.

6.1. Introduction

This chapter discusses a range of methodological issues that need to be addressed when measuring the working environment. In other words, after having reviewed the range of concepts to be measured in Chapter 5, this chapter turns to the best approaches to measuring them, i.e. the modes of data collection and choices of the unit of analysis, survey methodology and questionnaire design.

The chapter has three main sections. Section 6.2 discusses issues related to data collection, arguing that, where individual-level detail can be achieved, primary data sources have clear advantages over secondary sources. Among different forms of primary data, sample surveys with a large number of observations are the most appropriate vehicle to measure the quality of the working environment, compared to qualitative interviews or direct observations of the daily routines of individual workers. Section 6.3 discusses the choice of the unit of analysis, comparing the benefits and drawbacks of measuring the quality of the working environment at the country, firm and individual level. Section 6.4 reviews in detail issues related to the survey methodology, providing recommendations drawn from best practice on the survey mode and questionnaire design, with a focus on the survey length, target population, sampling, use of proxy respondents, place of interview, question order and response scales. Finally, Section 6.5 summarises the key points made in the chapter.

The methodological discussion in this chapter underpins the recommendations detailed in Annex 6.A for implementing a set of modules on the quality of the working environment that could be included in various survey vehicles. These include: 1) an extended module on the quality of the working environment that could be attached to a broad working conditions survey; 2) a more condensed working environment module that could be run as an ad hoc module of a labour-force survey; and 3) a few core questions that could be implemented in the context of an annual general social survey. The general features of these modules are described in Box 6.1, while Annex 6.A provides specific questions and guidance.

Box 6.1. **Prototype survey modules on the quality of the working environment**

These *Guidelines* include a set of prototype survey modules for measuring the quality of the work environment that could be used as a reference point for data producers (e.g. national statistical offices and others). Three sets of prototype modules are described in Annex 6.A, with items phrased as statements that can be answered using a 1 to 5 agreement-disagreement scale to reduce the cognitive burden on respondents:

- An extended survey module containing 25 items selected from existing national and international surveys and covering the 17 characteristics of the quality of the working environment discussed in Chapter 3. If used in its entirety, this module would provide

Box 6.1. **Prototype survey modules on the quality of the working environment** (cont.)

the data needed to compile a dashboard of indicators assessing various dimensions of the working environment in a comprehensive way. The module is designed for use in surveys with a specific focus on employment, such as working conditions surveys, and could be implemented every four to six years. The items in this module help to identify the dimensions of the quality of the working environment that require policy action, whereas the recommended periodicity would allow the monitoring of changes in those dimensions over time.

- A condensed module includes a subset of the extended module, i.e. 13 questions for which evidence on statistical reliability is strongest. This module could be used in cases where, despite limited questionnaire space, there is a need for measuring all the dimensions of the quality of the environment in a less detailed way.
- A core set provides a minimal set of measures on the working environment that could be included in general social surveys and implemented on a yearly basis. The core items included here do not cover all dimensions of the working environment, but rather aim to anchor this concept in policy discussions, alongside traditional measures of labour quantity. These questions are also suitable for international comparison and apply to a wide array of labour-market situations (e.g. employees and self-employed, workers in both the formal and informal sectors).

6.2. Mode of data collection

The mode of data collection refers to the methods that researchers and NSOs use when collecting information. The methods to be used depend on the nature of the variables examined, the detail required and the resources available. The main distinction made in this chapter is between *primary* and *secondary* data. While primary data consist of data gathered through surveys or from observations designed and implemented by researchers or NSOs, there are different types of secondary data, including administrative records, census data, data from private and public agencies, and official government data.

Primary data have the advantage of addressing the specific research questions that the researchers have in mind, capturing complex and multidimensional concepts, providing information relevant for analysing the drivers and consequences of the phenomenon under review, and revealing individual differences and inequalities across population groups. However, collecting primary data requires not only resources but also experience: it is costly and time-consuming and has to rely on a solid methodology.

Secondary data, on the contrary, can be readily available. Researchers and policy analysts can access them directly via official sources, most of the time without a fee, or with a fee that is much less than the costs of collecting primary data. These types of data enable international comparisons when they are sourced from data produced following international guidelines. Researchers can compile a set of data sources to generate a more comprehensive dataset, as secondary data tends to be at the macro (e.g. country) or meso level (e.g. occupation, industry or region). However, these data are usually not sufficiently detailed and often not as timely as required, and the information provided may not reflect the outcomes of interest, but rather the procedures that are designed to achieve those outcomes.

Primary data

These *Guidelines* have defined the quality of the working environment as a multidimensional concept, arguing that it should be conceptualised at the individual level, measured by focusing on outcomes experienced by individual workers, and focused on those attributes of jobs that can be evaluated by a third party (even when they are measured through individuals' self-reports, Chapter 4). Primary data are therefore the most convenient method to collect information on the quality of the working environment.

The main strength of primary data is the ability to address the multidimensional aspect of the working environment through a set of well-designed questions (as described in Chapter 4). A good working environment is one that not only lacks job stressors such as physical health risk factors or high work intensity, but that also provides resources that help workers to carry out their work tasks and flourish throughout their careers. Only primary data allow the assessment of interactions among various dimensions of the work environment, such as buffering effects and trade-offs.

Another reason why primary data are preferable to secondary data is that they provide individual-level observations. There are large differences in working conditions across population groups; individual-level data allow the identification of vulnerable groups and the design of policies to improve their conditions. Finally, primary data on working conditions allow a focus on outcomes rather than procedures: as argued in Chapter 4, even though labour-market institutions or firm-level management practices shape the general layout of working conditions, work is carried out by individual workers, and each worker's experience of his or her working environment is unique. Also, focusing on, for instance, the regulations applying to working time or health and safety would capture only *de jure* working conditions rather than *de facto* ones. Moreover, due to the lag between implementing regulations and their impact on working conditions, the information provided by secondary data could only be out of date.

Primary data are appropriate for focusing on the objective job characteristics that research has identified as essential for the well-being of workers. As discussed in Chapter 4, there is an extensive body of research that shows which job characteristics matter the most from a well-being perspective, and these characteristics can be measured in a reliable manner by collecting primary data.

The *Guidelines*, in short, argue that primary data sources such as surveys, qualitative interviews and observations are more appropriate for measuring the quality of the working environment than secondary data sources such as administrative records.

Sample surveys

Among various primary data sources, surveys conducted by interviewing individual workers are recommended over qualitative observations. Special working conditions surveys are the most comprehensive method for measuring the quality of the working environment. These surveys aim at providing a detailed picture of the actual work carried out by individuals who are currently in paid work. Rather than looking at the prescribed tasks of a particular job title as described by the employer or clients, working conditions surveys ask workers to assess the degree to which a large set of conditions apply to their work setting. These conditions, such as the risks and constraints of work tasks as well as the resources available to carry them out, are assessed in terms of their presence, intensity or frequency. Typically, working conditions surveys cover issues such as working time, work organisation,

learning and training, physical and psychosocial risks, health and safety, the work-life balance and worker participation. Questions on the quality of the working environment are often supplemented by questions on earnings, fringe benefits, employment security, health and well-being, and sometimes on previous jobs and unemployment experience. Working conditions surveys allow the identification of policy reforms and management practices needed to improve the lives of working people.

Working conditions surveys have major strengths in terms of measuring the quality of the working environment. First, since the entire questionnaire is dedicated to working conditions, these surveys contain detailed information on non-pay aspects of the job, which are usually omitted in more general surveys. As working conditions surveys contain a large number of questions on all three broad dimensions of job quality (i.e. earnings quality, labour-market security and the quality of the working environment), the complex and multidimensional aspect of job quality can be comprehensively captured, and the relationship between the working environment and other aspects of employment can be investigated. These surveys also allow researchers and policy analysts to examine whether there are trade-offs or synergies among earnings, labour-market security and the working environment, which is not usually possible with other types of data. For example, labour-force surveys contain detailed information on earnings, but lack a set of questions to capture the multidimensional aspect of the working environment.

Another advantage of working conditions surveys is that the sampling frame is usually defined in terms of the individuals in the workforce, which allows a large sample size. One problem with general population surveys or other household surveys for measuring the quality of the working environment is that (with the exception of labour-force surveys or censuses) the sample size tends to be reduced almost by half for questions about the characteristics of the current job, which apply only to respondents with paid work. For example, general social surveys that target the entire adult population with a sample size of 1 000 people may capture only around 500 employed individuals whose working conditions could be analysed, which makes disaggregation into population groups quite difficult. Special working conditions surveys, on the contrary, tend to have an adequate sample size of employed people, which can be used for analysing the quality of the working environment in more detail and for disaggregating results across groups of workers with different characteristics.

There have been a number of different types of working conditions surveys, each with their distinctive benefits and drawbacks. Special working conditions surveys have been carried out in a large number of countries, some of which have been running for over three decades. In addition to the British Skills and Employment Surveys series, with six waves conducted since 1986, and the French *Enquête de Conditions de Travail*, with five waves since 1984 (Chapter 2), a large number of countries have been conducting surveys on work and employment relations, some of which have elements for measuring the quality of the working environment: these countries include Austria, Bulgaria, Canada, Chile, China, the Czech Republic, Denmark, Estonia, Finland, Germany, Greece, Italy, Japan, Korea, Mexico, Norway, the Slovak Republic, Spain, Sweden and the United States.

Beyond these national initiatives, European Working Conditions Surveys have been running since 1991, providing comparable measures for 36 countries, with the most recent wave conducted in 2015. The EWCS, as discussed in Chapters 2 and 5, is among the instruments providing the most detailed information on all aspects of the quality of the

working environment, and allows the examination of changes in job quality across many European countries. The EWCS sample size of at least 1 000 respondents per country¹ allows some basic population breakdowns but no detailed disaggregation.

National labour-force surveys are large-scale household surveys of working and non-working individuals designed to produce statistics concerning employment and unemployment. These surveys, which are often conducted every quarter or month, cover demographic characteristics, labour-force status, the demographic characteristics of each adult household member (those in the eligible age bracket), employment status, contract type, working hours, sector of employment, participation in training, formal/informal work and occupation; for respondents who are absent from work, questions on the duration and reasons of absence are asked; for those with no jobs, questions on job search activities, availability to start work, and reasons for inactivity are also asked.

Regular labour-force surveys are often supplemented with ad hoc modules (AHMs) that collect information on selected topics such as work accidents, the labour-market conditions of specific population groups (e.g. migrants, youth, disabled or retired people), the reconciliation of work and family, and lifelong learning. Some of these ad hoc modules have addressed one or another aspect of the quality of the working environment. For example, several ad hoc modules of the European Union Labour Force Surveys probe respondents about various topics, one at a time, with around 13 variables included in each module. Since 1999, the EU-LFS has collected supplementary information on a number of topics, including some through repeated modules that address some dimensions of the working environment (Table 6.1). Thanks to their large size, these AHMs are a useful resource for measuring these dimensions of the quality of the working environment. However, since only one topic is covered in each module, the existing AHMs do not allow the measurement of the multidimensionality of the working environment at the individual level.²

Table 6.1. **Specific topics covered in EU-LFS ad hoc modules**

| Year | Topic |
|------|---|
| 1999 | Accidents at work and occupational diseases |
| 2000 | Transition from school to working life |
| 2001 | Length and patterns of working time |
| 2002 | Employment of disabled people |
| 2003 | Lifelong learning |
| 2004 | Work organisation and working-time arrangements |
| 2005 | Reconciliation between work and family life |
| 2006 | Transition from work into retirement |
| 2007 | Work related accidents, health problems and hazardous exposure |
| 2008 | Labour-market situation of migrants |
| 2009 | Entry of young people into the labour market |
| 2010 | Reconciliation between work and family life |
| 2011 | Employment of disabled people |
| 2012 | Transition from work into retirement |
| 2013 | Accidents at work and other work-related health problems |
| 2014 | Labour-market situation of migrants and their immediate descendants |
| 2016 | Young people on the labour market |
| 2017 | Self-employment |

Bringing together many of the questions on the quality of the working environment that are already included in AHMs into a single module would provide important advantages.

- First, labour-force surveys have remarkably large sample sizes compared to other types of surveys that contain information on working conditions. This large sample size would allow the investigation of differences in the quality of the working environment across occupational categories or industries, which is not always possible with working conditions surveys. One disadvantage of AHMs is that, even though labour-force surveys generally have a large sample size, a significant share of responses is provided by *proxy* respondents (i.e. other household members present at the time of the interview), while questions on job quality can be answered only by respondents in person. Proxy respondents often account for almost half of all respondents to the EU-LFS, and the composition of proxy respondents is typically non-random (i.e. those who have the most demanding jobs are more likely to be absent when contacted for an interview, and thus *proxied*). Therefore, for the AHMs to become a good data source on the quality of the working environment, a possible module on this issue should be answered only by workers in the LFS sample, thus not allowing proxy respondents. (This is further discussed in Section 6.4.)
- Second, having a specific AHM module focused on the quality of the working environment should ensure cross-country comparability. Currently, EU countries implement the European Labour Force Survey and its AHMs following the recommendations provided by Eurostat, who then harmonises country datasets into a common comparable dataset. While these recommendations refer to question wording, response scales and question order, individual NSOs have some autonomy over the extent to which these recommendations are followed. A topic like the quality of the working environment is likely to be susceptible to questionnaire design, thus cross-country comparability could be compromised if a common methodology is not followed by all the participating countries. For example, data for countries where the survey asks questions relating to exposure to risk factors just after questions on health status may not be comparable to those pertaining to other countries that follow the opposite order; this is because thinking about health status first may prime respondents to overstate risk factors at work.
- Third, labour-force surveys have been widely used to measure labour-market performance and to inform labour policies, in particular for assessing employment and unemployment, wages and working hours. An ad hoc module on the quality of the working environment would enable an assessment of working conditions alongside employment counts and earnings, as well as an identification of possible trade-offs between the quantity and quality of jobs, thereby bringing the quality of the working environment to the core of labour-market policies.

While labour-force surveys rely on international standards laid down by the International Conference of Labour Statisticians, no international guidance currently exists for general social surveys (GSSs) covering a broad range of life dimensions. GSSs originated in the United States in the 1970s in order to monitor societal change and people's behaviours, attitudes and attributes. GSSs of this type are now being carried out by a large number of countries on a regular basis (Fleischer et al., 2016), in the form of either national surveys or cross-national surveys like the International Social Survey Programme (ISSP) and the European Social Survey (ESS). National GSSs tend to have a large and representative sample and cover a wide range of topics such as socio-economic conditions, health status, social mobility, social control, family relations, civil liberties, values and attitudes. Most GSSs also contain special modules on work that are carried out on an irregular basis. Examples of these special modules include the Education, Work and Retirement annex of the 1994 Canadian

GSS, the Work Orientations module of the ISSP (1989, 1998, 2005, 2015) and the Work, Family and Well-being modules of the ESS (2004 and 2010).

While special work modules of GSSs contain a number of questions on job characteristics that are relevant for assessing the quality of the working environment, these aspects do not always appear in the annual (or bi-annual) surveys, and these special modules are conducted only irregularly. This implies that it is not always possible to monitor short-term changes in working conditions through these surveys or to investigate the drivers and outcomes of job quality in relation to a large set of social factors. However, due to their large samples and their coverage of an extensive range of social issues, GSSs are a good vehicle to monitor changes and understand drivers and impacts of the quality of the working environment. A selection of core questions that could be introduced in surveys to monitor the quality of the working environment on a regular basis is presented in Annex 6.A.

Qualitative interviews

Qualitative interviews are small-scale surveys of specific groups of the population dealing with a specific issue. These interviews could be especially useful to assess what aspects of the working environment are more relevant for workers in a specific occupation and, if necessary, how survey questions could be formulated in a way suitable for inclusion in a general-population survey.

Shadow worker

Another approach to measuring job characteristics is the so called “shadow worker” method, where the interviewer spends a typical work-day (or work-week) with the respondent (a worker with a given set of characteristics) and records the work activities and the conditions under which work is carried out, instead of asking the individual worker about these conditions. The general idea of “shadowing” is to follow workers wherever they are and whatever they do. This instrument has been predominantly used for enabling learning in apprenticeship programs, but also for collecting material in research projects, particularly for organisational management studies. This method can also be used to measure the quality of the working environment. The specific advantage of this instrument is that it eliminates any possible element of subjectivity that can be introduced by workers’ self-reports, although it may introduce other problems of subjectivity with respect to the “shadow” observer.

In a shadow worker study, the observer needs to have a precise understanding of what to look for in the daily activities of workers and in the physical and social environment where work takes place, so that he or she can transcribe their observations into objective job characteristics. A well-structured questionnaire, or set of questions, is of critical importance when undertaking this type of study. Since it is the observer who completes the questionnaire, based on their daily observations, evidence from this type of study may be free from the potential biases introduced by question order and question wording, such as priming, that affects surveys. Another strength of shadowing is that it enables the observer to capture a slice of a worker’s working environment in detail, which can be useful when investigating the many aspects of people’s work. Through these studies, the observer can gain a detailed overview of a worker’s daily work tasks, the environment surrounding workers, and of how work is organised.

However, shadowing is a costly method with potential drawbacks. For a given research budget, shadow worker studies would typically provide a much smaller number of

observations than those allowed by sample surveys. As compared to the 30/50 minutes that an interviewer may spend with a respondent, shadowing requires that a highly trained observer spends a significant amount of time with the worker (i.e. at least half a day).

In situations where the observer does not code their findings immediately, shadowing also requires a substantial amount of time for data coding. Also, the work day that is selected for shadowing, even the work week chosen, may not be representative of a worker's typical day. Shadowing a worker on an extremely busy day, with tight deadlines and production pressures, will overestimate work demands and underestimate job resources, whereas a quiet work day could underestimate physical and social risks. Moreover, some job characteristics cannot be captured in a one-off study referring to an average day: some aspects of the job that have crucial implications for workers' well-being take place only irregularly, but are still fundamental for understanding the quality of the working environment. For example, the shadow observer is likely to miss formal training opportunities provided by the current job, unless a training activity takes place on the day of the observation. Similarly, while discrimination and intimidation have a large negative impact on workers' well-being, and hence on the quality of the working environment, they typically take place subtly or rarely, and may be unobservable to the researcher. Finally, the behaviours of colleagues and supervisors may be modified by the presence of the shadow worker.

Secondary data

Other data sources, such as administrative records from work inspections or health and safety regulations, are a potentially important source of secondary information on the quality of the working environment. One strength of secondary data is that they refer almost always to objective aspects (e.g. a work accident) observable by a third party, rather than to subjective ones (i.e. satisfaction of workers with a particular aspect of their jobs). As discussed in Chapter 4, subjective measures of workers' satisfaction with their working conditions may conceal the actual characteristics of the work environment, as they may be influenced by workers' expectations. For example, in the case of physical risk factors, a worker who had previously worked in mines could be totally satisfied with the safety at their current job at a construction site, since this site is much safer than the former job, despite the fact that construction sites can be much more dangerous than working at an automobile plant. Data from special agencies, such as Occupational Health and Safety Administrations (OHSA), provide accurate information on the incidence of fatal and non-fatal work accidents in different occupations. This offers a more reliable measure of the more extreme physical risk factors, while providing little light on other types of physical risks such as exposure to dangerous chemical substances.³

Box 6.2. Secondary data sources on the quality of the working environment

Several databases provide aggregate-level data on working conditions and employment relations that can be helpful when individual-level data on the quality of the working environment are not available. These databases are easy to access and are harmonised to different degree, thus allowing cross-country comparisons.

- The **OECD Job Quality Database** contains three headline indicators: earnings quality, labour-market security, and a composite measure of the quality of the working environment. Data on the quality of the working environment are available for most OECD countries from 2005, 2010 and 2015, and allow the construction of a Job Strain Index – a composite index showing the share of workers experiencing more

Box 6.2. Secondary data sources on the quality of the working environment (cont.)

job demands than the number of job resources available to them. The OECD Job Strain index is composed of various sub-indicators, data on which are also available in the OECD database: these refer to the share of workers experiencing time pressures, facing physical health risk factors, and having learning and training opportunities and social support at work. These individual-level measures are aggregated to identify the share of workers with high job demands or low job resources. The index is disaggregated by gender, education and age (<https://stats.oecd.org/Index.aspx?DataSetCode=JOBQ>).

- The **ETUI Job Quality Index (JQI)**, a quantitative indicator that captures job quality in Europe, is based on a database derived from a range of sources. The JQI is based on sub-indices (on wages, non-standard employment, working conditions, working time and work-life balance, training and interest representation) that capture different aspects of job quality. The JQI allows comparisons in a given year between the EU-27 countries, and comparisons over time for 15 countries (www.etui.org/Topics/Labour-market-employment-social-policy/Job-quality-index-JQI).
- The **ILO Database on Labour Statistics** contains comparable data on a number of labour-market indicators, some of which relate to the quality of the working environment. Relevant indicators include: 1) working time (weekly hours actually worked per employed person by gender, economic activity and occupation); and 2) health and safety at work (time lost due to occupational injuries, fatal occupational injuries, non-fatal occupational injuries, labour inspections) (www.ilo.org/ilostat).
- The **Eurostat Database** includes time-series of indicators on the quality of employment available for the EU-28 countries. Among the themes covered, two directly relate to the quality of the working environment: 1) safety and ethics of employment (with data on the number of fatal and non-fatal accidents and exposure to risk factors that can adversely affect physical health); and 2) working hours and work-life balance (including indicators of average weekly hours usually worked, long working hours, share of employed persons working at night, during evenings, weekends, and from home, by gender, professional status, full-time/part-time work, and economic activity) (<http://ec.europa.eu/eurostat/data/database>).
- The **EWCS data visualisation tool** provides access to country-level data from the 5th and 6th EWCS through the Eurofound webpage. The visualisation tool displays the distribution of responses for each question by country, as well as by gender, age group, employment status, occupation and sector (www.eurofound.europa.eu/surveys/data-visualisation).
- The **European Survey of Enterprises on New and Emerging Risks (ESENER)** interactive dashboard provides access to data from the EU enterprise survey with health and safety representatives of 50 000 enterprises in 36 European countries. This survey includes questions on the presence of physical and psychological risk factors within the company. Data related to the quality of the working environment refer to workers' exposure to tiring positions, lifting or moving heavy loads, loud noise, repetitive hand or arm movements, heat, cold or draught, risk of accidents with machines or tools, risk of accidents with vehicles, chemical or biological substances, risk of slips, trips or falls, time pressure, poor communication or co-operation within the organisation, employees' lack of influence over their work pace or work processes, job insecurity, having to deal with difficult customers, patients, pupils, etc., long or irregular working hours, and discrimination due to gender, age or ethnicity. Information is provided at the country level, with breakdowns by establishment size and sector of activity (<https://osha.europa.eu/en/surveys-and-statistics-osh/esener/2014>).

6.3. Unit of analysis: Aggregate versus individual-level data

Individual-level data

As discussed in Chapter 4 and earlier in this chapter, the quality of the working environment should be measured at the individual level. These data can then be aggregated at higher levels such as sectors of employment or occupations, depending on the issue of

interest. However, there are different approaches to individual-level measurement. Should information on job characteristics be obtained from the employers, who potentially plan and design the work and working conditions, or from the employees who experience the work? Should the unit of analysis be the individual worker or the various jobs (e.g. primary and secondary) that they may perform? Should employees and self-employed workers be analysed in the same way, or does the distinct nature of each group require its own measurement tool? Can proxy respondents be used to collect information on job characteristics? After weighing the strengths and weaknesses of these alternative approaches, this section argues that the working environment is measured best when the information is collected directly from workers, and where the unit of analysis is the job. This section also argues that the working environment can be measured following the same principles for both employees and the self-employed, with a few differences with respect to the scope of questions, and that proxy respondents should be avoided, as other family members are not well placed to provide information about the characteristics of a relative's job.

Employer and employee surveys

Firms' policies and practices have a large influence on the conditions under which work is carried out. As these policies and practices are decided and implemented by a firm's management and human relations (HR) unit, interviewing them directly about the firm's policies could provide a direct assessment of the quality of the working environment. This is the case, for example, of firms that adopt formal processes and procedures, so-called "High Performance Work Organisations", which imply a flatter and less hierarchical structure, and where autonomous teams tend to enjoy greater task discretion and social support at work (OECD, 1999; Dex et al., 2002; Inanc et al., 2015). Similarly, the existence of family-friendly HR practices, such as flexitime arrangements that allow individual workers to maintain a better work-life balance, or of formal appraisal procedures, which may benefit workers through greater task clarity and performance feedback, could be reported directly by firms' management. Collecting information from employers on these practices could potentially be a viable method of measuring the quality of the working environment, especially when managers and HR officers are more knowledgeable about firm practices than employees.

There are indeed a number of national surveys that have been running for over a quarter of a century and that have successfully explored employment relations from the perspective of managers and employers. Examples of such surveys include the UK Workplace and Employment Relation Survey (WERS), Canada's Workplace and Employee Survey, Australia's Workplace Industrial Relations Survey, and the US National Organisational Survey. Some of these surveys match information from managers, workers' representatives and employees, illustrating employment relations from different angles. For example, the 2004 WERS survey interviews managers about a range of topics that directly relate to a number of job characteristics to determine the quality of the working environment (Department of Trade and Industry et al., 2014). These characteristics include:

- the degree to which workers are informed and consulted about a range of workplace decisions
- training opportunities provided to the largest occupational group within the firm during the previous 12 months, measured in terms of incidence, duration and usefulness
- number and types of workplace injuries and illnesses recorded within the last 12 months
- equal treatment and anti-discrimination practices

- level of task discretion and amount of autonomy on work pace enjoyed by employees
- official working hours of the firm and the share of employees who work overtime
- tele-working, maternal and paternal leave policies.

The quality of the workplace and the work environment can potentially be measured directly by using information obtained from managers and/or HR officers in firms. However, there are obvious drawbacks to relying solely on *employers' views* when measuring the quality of the working environment. The most serious of these drawbacks is that there is often a large heterogeneity within the firm in terms of the conditions under which work is carried out by individual workers, which can get lost in the managers' or HR's account. The information obtained from employers could apply to a majority of workers in certain areas, such as participation in workplace decisions, but not in others. For example, two workers at the same firm can have very different exposures to risk factors, emotional demands or work intensity, depending on their role within the company. Relying solely on firm characteristics and practices would conceal this heterogeneity of the working environment within the firm. This approach also makes it difficult to break down working conditions by population sub-groups, reducing the policy relevance of these data for vulnerable groups.

A second drawback is the possible discrepancy between employees' awareness of firm policies and what is offered by the employer. This discrepancy could result from a number of factors, including ineffective communication strategies by management, differences among workers' characteristics that affect take-up (Dex et al. 2002), or employees' reluctance to take up tasks and opportunities unless the supervisor or the organisation is perceived to be supportive (Eaton, 2003; Hayman, 2009). Another issue is that the accounts from higher management of the company's work environment could suffer from "desirability bias". How well a firm fares in terms of the quality of the working environment significantly reflects the skills and capabilities of the managers, who may intentionally or unintentionally draw a rosier picture of the working conditions in their firm than what would be drawn by the employees.

A third issue is that not all paid work in a society is carried out in firms. Own-account workers and the self-employed represent a significant portion of the workforce. This implies that relying on firm-level data on job characteristics would provide only a partial picture. This *non-representation problem* is a special concern for countries where a sizable share of the workforce is self-employed or in the informal sector. Another problem is that most employers' surveys rely on a threshold in terms of size for selecting eligible businesses (e.g. those with 5 workers or more), thus missing working conditions in smaller firms. Statistics that rely on firm-level data collected from managers and supervisors may thus be unrepresentative of the quality of the working environment of the overall work force.

Last but not least, individual workers are the best informants about their jobs and working conditions. Even if the information obtained from managers were detailed enough and matched employees' experiences, the interactions and trade-offs between various job characteristics as experienced by workers would be lost. This implies that employers could only be a secondary or supplementary source when measuring the quality of the working environment.

Even though collecting statistics on the quality of the working environment from workers has most advantages, it is important to stress that businesses play an important role in monitoring working conditions. Business, should, if it does not do so already, assess the quality of the working conditions regularly through surveys of their employees, both

within their enterprises and (ideally) throughout their supply chain. These regular performance assessments are crucial for taking actions towards improving working conditions throughout society.

Workers and jobs

The quality of the working environment should focus on job characteristics such as the work intensity, physical conditions and opportunities that the job provides for advancement, rather than worker characteristics such as skills levels or dispositions. Each job has its stressors and resources, which can offset each other, whereas worker characteristics apply to the multiple jobs held by a worker. While this distinction, and the preference for focusing on specific jobs, is sensible in theory, in practice only a minority of workers hold multiple jobs.⁴ For these workers, it may happen that they enjoy a high-quality working environment in their first job and poor-quality working environments in their second or third jobs. Another possibility is that each job, taken on its own, is *good*, but that the accumulation of multiple jobs in itself is a source of stress and poor working conditions for the workers involved.

Ideally, the quality of the working environment should account for all the jobs held by a worker, with questions pertaining to each of these separately. However, due to questionnaire space, surveys often focus on the main job (i.e. the job where the person works the largest number of hours, or most regularly), for example, by asking about the number of hours the worker usually works in their main job, and missing out those secondary or tertiary jobs that can potentially be of poor quality.

In contexts where multiple jobs are not very common, focusing on the main job is a reasonable approach, since the main job is likely to affect workers' well-being the most. However, when working in multiple jobs is more common, the survey should address this issue in order to provide a more comprehensive picture of working conditions. This could be done by asking first the number of jobs people work at, followed by questions about whether or not workers experience a specific job characteristic in any of their jobs. While this approach does not allow the analysis of the cumulative nature and trade-offs between characteristics at the job level, it has the advantage of retaining a *worker's perspective*. Alternatively, if questionnaire space allows, a selection of questions on job characteristics could be asked for each job.

Employees and the self-employed

Much of the research on the quality of the working environment considers self-employment as an important driver of job quality. Self-employment can be a marker either of good-quality jobs, since it provides workers with greater opportunities for autonomy and intrinsic rewards, or of poor quality, when it implies lower social security among marginalised workers. Because of this potential ambivalence, the OECD Job Quality Framework argued that self-employment should not be considered as an *aspect* of job quality *per se* but rather that most of the job characteristics that define the quality of the working environment should be relevant to both employees and the self-employed.

The principles that underpin these *Guidelines* are applicable to both employees and the self-employed. The quality of the working environment for both groups of workers should be measured by looking at objective outcomes experienced by individual workers. If worded carefully, most of the job characteristics discussed in Chapters 4 and 5 are relevant for both groups of workers, with the exception of organisational characteristics,

which are not always applicable to the self-employed. Therefore, a single questionnaire, or a battery of questions, can be used when measuring the quality of the working environment of all workers.

However, the survey instrument that is used to measure the quality of the working environment should clearly distinguish between employees and the self-employed, for two main reasons.

- First, what constitutes a good working environment may vary between the two groups of workers. The self-employed are often self-selected into working as their own boss, implying that certain aspects of their job will affect their well-being less or more than in the case of employees. For example, the self-employed often enjoy higher autonomy and task discretion and more flexible working hours compared to employees; if the sample contains a disproportionately high number of self-employed workers, the quality of the working environment for these job characteristics will mechanically be higher than the population average. Identification of the self-employed in a survey thus helps to correct sample selection bias on employment status by introducing sampling weights. It allows more accurate comparison across populations that vary in terms of the prevalence of self-employment (e.g. across occupation groups, economic activities or countries) by breaking down the sample by employment status.
- Second, identifying the self-employed is important as, if questionnaire space allows, the survey can include separate questions asked of employees and the self-employed, which would help explore the working environment of the two groups in greater detail.

Questions directed to both employees and the self-employed should be worded in such a way that they refer to the job, rather than to a specific employer or supervisor. For example, survey questions measuring task discretion and autonomy that are asked to both employees and the self-employed should be phrased as “Are you able to choose or change your order of tasks” (as the EWCS does), instead of “How much does the management at your work allow you to decide how your own daily work is organised?” (as in the ESS), which (by referring to managers) applies only to employees. Similarly, questions on the flexibility of working hours should not ask “whether the employer or manager allows you to take a few hours off to take care of personal matters” but rather whether it would be difficult for the worker to take an hour or two off during working hours to take care of personal or family matters, as is done in the EWCS, ESS, ISSP and the British Skills and Employment Survey. Wording these questions with references to *management* will prevent the self-employed from answering, whereas using general wording that refers to the job will enable both employees and the self-employed to relate to the issues at hand.

Firm-level data

Even though individual-level information is the ideal level of measurement for the quality of the working environment, firm-level data might provide a useful source of information either as a complement to individual-level information or as a substitute when micro-level data are unavailable. How the work is organised in a firm, the nature of human resources (HR) policies, and the extent to which employees are given an opportunity to participate in decision making contribute to both company performance and employee well-being. Since representatives of management have extensive knowledge of workplace policies and practices in the firm, their accounts can provide valuable information on the quality of the working environment. This could include areas where employees lack information

because they do not have relevant experience (e.g. training) but could potentially benefit in the future. In order to get a more fine-grained picture of the working environment with firm-level data, these surveys should include information on the distribution of employees by age, gender, education and job tenure. A good example of this type of survey is provided by Eurofound's European Establishment Survey (Box 6.3).

Box 6.3. Measuring the quality of the working environment from the managers' point of view: Questions from the European Establishment Survey (2013)

The European Company Survey (ECS) is a telephone survey of establishments in Europe carried out by Eurofound, based on interviews with a management representative (the most senior person in charge of personnel) and – where available – an employee representative responsible for the establishment. The employee representative respondent is identified through a series of questions in the management questionnaire. These questions are adapted to match the institutional structure of each country. The unit of analysis for the survey, as in previous waves, is the establishment, with the target population made up of all establishments with 10 or more employees in all economic sectors except *agriculture, forestry and fishing* (i.e. NACE Rev. 2 category A), *activities of the household* (category T) and *activities of extraterritorial organisation and bodies* (Category U). The ECS covers all 28 EU Member States, as well as Iceland, the former Yugoslav Republic of Macedonia, Montenegro and Turkey. The total number of interviews conducted for the ECS in 2013 was 30 113 management interviews and 9 094 employee representative interviews. The survey covers three main areas:

- work organisation (collaboration and outsourcing, internal organisation and information management, decision making on daily tasks)
- human resource management (recruitment and career development, training, working-time flexibility, variable pay schemes)
- employee participation and social dialogue (direct employee participation, workplace social dialogue).

A number of questions from the management survey contain information on the quality of the working environment that are important for workers' well-being and firms' productivity, namely:

- "How would you rate the current general work climate in this establishment? Is it very good, good, neither good nor bad, bad, or very bad?"
- "Who normally decides on the planning and execution of the daily work tasks of the employees at this establishment?" (with response categories: 1) the employee undertaking the tasks; 2) managers/supervisors, and 3) both employees and managers/supervisors).
- "In the past 12 months, what percentage of employees received paid time-off from their normal duties to undertake training, either off or on your premises?"
- "Approximately what percentage of employees have the possibility to adapt – within certain limits – the time when they begin or finish their daily work according to their personal needs or wishes?"
- "In this establishment, which of the following practices are used to involve employees in how work is organised?" (with response categories: regular meetings between employees and immediate manager, regular staff meetings open to all employees at the establishment, meetings of a temporary group or committee or ad hoc group, dissemination of information through newsletters, website, notice boards, email, etc., discussions with employees through social media or in online discussion boards, suggestion schemes, employee surveys among employees).

Source: Eurofound (2015), *Third European Company Survey – Overview report: Workplace practices – Patterns, performance and well-being*, Publications Office of the European Union, Luxembourg.

However, one should be aware of some of the previously mentioned caveats of using firm-level data to measure job quality. First, the quality of the working environment is distributed unevenly within firms, and even in firms with employee-oriented HR practices

there will be workers whose working conditions are much worse than others. Second, since representatives of management who are often interviewed in firm surveys are the “public face” of their organisation, their responses to company surveys may be positively biased. Third, the quality of the working environment of the self-employed and employees working in smaller firms (company surveys often select workplaces with more than 5 or 10 employees) will be missed.

Country-level data

The working environment, by definition, is the combination of work characteristics that are experienced by workers; thus, it can be measured only at the individual level. It is not possible to measure, for example, the level of autonomy that workers enjoy in a country without collecting this information at the micro level. In the absence of individual-level data, information collected at the firm level can be used as a proxy for the working environment of a share of workers. But without data at the worker level, it will not be possible to measure the quality of the working environment directly at the country level. Aggregating the individual-level data and reporting them at the country level has a number of benefits, such as facilitating communication, monitoring progress, and helping the quality of the working environment become a policy concern. At the same time, country-level measure on the quality of the working environment should ideally be based on sample sizes that are large enough to guarantee the robustness of estimates at the occupation (ISCO) and industry level (NACE); when these breakdowns are not taken into account, country differences in the quality of the working environment may reflect differences in the structure of employment across countries rather than to differences in the working environment at the level of specific occupations and industries.

6.4. Survey methodology

Mode effects

The ways in which interviews in a survey are conducted (i.e. mode effects) may affect the comparability of estimates across surveys. The quality of the data on the working environment may differ if responses are collected via, for example, face-to-face interviews or online surveys. A large body of research on survey methodology shows that differences in survey mode (Table 6.2) can affect respondents’ answers even when the question asked is exactly the same.

Table 6.2. **Modes of surveys commonly used in research on work and employment**

| | Survey Mode |
|-------------|--|
| CAPI | Computer-assisted personal interviewing |
| CASI | Computer-assisted self-interviewing |
| CATI | Computer-assisted telephone interviewing |
| PAPI | Pen and paper interviewing |
| TAWI | Tablet-assisted web interviewing |

A mode effect can occur due to a number of mechanisms. Human interaction can affect the answers provided by people interviewed in so far as there is need and opportunity to clarify questions. Depending on the survey mode, privacy and audience effects can also occur; for example, having other people (e.g. managers or co-workers) present at the time of

the survey may influence how workers answer a question on their working environment. Another mode effect may arise due to differences in the pace of the survey, which may influence responses, depending on whether the pace is determined by the interviewer or by the respondent. Finally, the audio and visual presentation of questions may affect the burden imposed on respondents in terms of memory and information processing.

Mode effects can affect data comparability in three main ways. First, mode effects can result in coverage error. This occurs when not all members of the target population have an equal chance of being selected in the survey sample. Usually, face-to-face interviews that follow a random sampling do not suffer much from coverage error; however, bias could arise in telephone or online surveys as, for example, owners of land lines versus mobile phones can differ systematically in their socio-demographic characteristics, as could those whose telephone numbers are listed versus those who are not. Similarly, the “technology divide” among internet users and non-users can influence the probability of individuals from certain socio-demographic groups being covered as part of a sampling frame.

A second form of bias is non-response due to mode effect. Non-response bias refers to some respondents’ being less likely (or refusing) to participate in a survey simply because of the mode in which it is carried out. For example, a study in the US found that respondents prefer mail surveys over telephone surveys, telephone surveys over internet surveys, and internet surveys over in-person surveys (Olson et al., 2012). In mixed-mode surveys that combine two or more types of interviews, these individual preferences can affect the probability of participating in the survey and lead to results that differ systematically across socio-demographic groups. The survey mode can also affect item non-response, i.e. some respondents may skip certain questions depending on the mode of the survey. Usually, face-to-face interviews have the lowest level of item non-response, whereas survey modes that involve self-administration tend to have a higher item non-response rate.

The third form of bias that is introduced by the survey mode is the measurement error that can occur because of social desirability or privacy concerns due to the presence of other people when the interview takes place. While a lack of anonymity and/or confidentiality can lead respondents to report higher level of socially desirable attributes, in both face-to-face interviews and (to a lesser degree) telephone interviews, respondents may suppress their attitudes in the presence of others at the time of the interview. These forms of bias are particularly prevalent in questions with a subjective element. For example, respondents are more likely to report that wages are an important determinant of their job satisfaction in self-administered surveys compared to those where the answer is directly given to an interviewer (Conti and Pudney, 2011). Similarly, anxiety levels appear higher in survey modes where there is no interaction with an interviewer compared to face-to-face interviews. The presence of others during the interview affects responses as well. For example, a longitudinal study using the British Household Panel Study showed that women express a lower level of satisfaction with their job when their partner is in the room, compared to when they are interviewed alone (Conti and Pudney, 2011); according to the authors of this study, this could be related to within-couple bargaining behaviour, i.e. each partner may have an incentive to overstate their personal sacrifice and understate their job satisfaction in order to maintain a strong bargaining position. Women may also be more reluctant to report to the interviewer something that could conflict with the gender roles prevalent in society (Booth and van Ours, 2008), which could be a concern particularly for mothers in full-time jobs. Measurement bias can also occur in survey questions measuring the objective job characteristics that were

discussed in Chapter 4, although these types of questions are generally more robust to measurement error. Box 6.4 describes differences in response rates and styles in the case of face-to-face and internet-based surveys of working conditions in France.

Box 6.4. Mode effects: Experimental survey of working life quality in France

In recent years, tighter budget constraints have led many NSOs to rely increasingly on internet surveys. To investigate the extent to which an internet survey mode lowers statistical quality, the French statistical office (INSEE) recently launched a set of multi-mode experimental surveys. The first of these surveys was the Experimental Survey of Housing (Internet/Paper), in summer 2010, followed by the Thefts, Violence and Safety survey (Internet/Paper), run in parallel to the 2013 survey of Living, Environment and Safety (CVS). As part of this programme, in 2013 the INSEE conducted the Experimental Survey of Working Life Quality (QVT), which was run in parallel to the *Enquête Conditions Travail* (CT) in order to explore mode effects on response rates and styles. The sample of 40 000 individuals who declared having received labour income were divided into two groups: half of them were only given the option of using an internet questionnaire, whereas the other half had the possibility to choose between an internet and paper questionnaire. The main purpose of the study was to compare estimates from the QVT with those obtained in the *Conditions Travail* (CT) survey. The study highlighted some important differences arising from survey mode:

- The face-to-face CT survey had a higher response rate (72%) than the self-administrated QVT (41%).
- Allowing QVT participants to choose between web or paper interviews led to a higher response rate (55%) than in the case where participants could conduct only a web interview (45%).
- After controlling for a number of observable characteristics, the response styles differed significantly in the case of subjective questions, with respondents replying more negatively in the self-administered QVT survey than in the face-to-face CT survey; conversely, the responses were broadly comparable between the two surveys in the case of more factual questions.
- Item non-response rates were higher in the self-administered QVT survey (31%) than in the face-to-face CT survey (17%).
- There is also evidence of self-selection effects in the self-administered QVT survey; people whose work involves a lot of physical activity are less likely to take a self-administered survey.

Source: Razafindranovona, T. (2017), "Exploitation de l'Enquête Expérimentale Qualité de vie au Travail", INSEE Working Paper, www.insee.fr/fr/statistiques/2584965.

Questionnaire design

Focus and content of the survey

The quality of the working environment can be measured through a variety of survey instruments, with the number of question items and the wording used for each question depending on the survey vehicle chosen. The questionnaire modules in Annex 6.A provide sets of recommended questions that could be incorporated in the different survey vehicles.

While the survey instrument can take various forms depending on the budget and other considerations, the selected survey vehicle always needs to include a number of covariates for analytical purposes. These covariates can be grouped into the following five dimensions:

- **Eligibility**, including items such as:
 - ❖ *Paid work*: Questions on the quality of the working environment should refer to the current job, implying that it is very important to identify the population with a paid job. Surveys of specialised working conditions use this identifier to determine whether an individual selected in random sampling is eligible to participate in the survey, whereas labour-force surveys or general social surveys that rely on a broader sampling frame can use the identifier to determine who is asked these questions, and who is not.
 - ❖ *Multiple jobs*: Since some workers hold multiple jobs, while questionnaire space allows asking about only the main job, a question on the number of jobs should be included.
 - ❖ *Employment status*: Surveys that measure the quality of the working environment should include questions on the employment status of respondents, as some aspects of the working environment are applicable only to employees but not to the self-employed.
- **Demographic characteristics**, such as:
 - ❖ *Age of the respondent*, in single years if possible. Age bands, while allowing for some cross-classification, are less desirable both because they allow less flexibility with respect to the groups examined and because they do not facilitate analysis of age as a continuous variable.
 - ❖ *Gender of the respondent*.
 - ❖ *Marital status*: This should include both the respondent's legal marital status, including whether the respondent is widowed, divorced or separated, and the social marital status, including whether the respondent is living with a partner even if not legally married.
 - ❖ *Children*: The number and age of children in the respondent's household unit, along with their relationship to the respondent.
 - ❖ *Household size*: The number of people living in the respondent's household. Household size is a distinct concept from family size, as more than one family unit can live in a dwelling.
 - ❖ *Migration status/Country of birth/Year of arrival*: The respondent's migration status, such as permanent residence, citizenship, etc., and/or country of birth.
- **Employment characteristics** such as:
 - ❖ *Contract type*: The quality of the working environment typically differs between temporary and permanent contract holders. Additionally, various types of temporary employees may differ in the quality of their jobs. The survey should allow distinguishing between contracts of unlimited duration, fixed-term contracts, contracts through temporary employment agencies, and apprenticeships.
 - ❖ *Occupation and industry of employment*: The quality of the working environment will also vary depending on workers' occupations and sectors of employment. Survey modules on the working environment should hence include questions on these two aspects of the employment relation (based on existing international classifications), both to highlight systemic differences across workers belonging to different categories and to allow assessing the importance of structural differences in the occupation and

industry composition of employment for country-level measures of the quality of the working environment.

- ❖ *Weekly working hours*: This question should ideally refer to the usual weekly hours someone works, rather than to the contractual hours, since some individuals may often have to work longer hours than contracted in order to meet job demands. The recommendation is to measure the usual hours worked both in the main job and in all jobs separately.

In addition to demographic and work-contract characteristics, which can be used to analyse differences across population groups and types of workers, surveys on the quality of the working environment should also include questions on the impacts that the working environment might have on workers' well-being and on firms' productivity; while these impacts are not aspects of the working environment *per se*, gathering information about them would allow the assessment of the pay-offs of any changes in policies and management practices to workers and firms. Where space allows, it would hence also be beneficial to include questions on:

- **Work-related well-being**, encompassing aspects such as:
 - ❖ *Job satisfaction*: A question on workers' satisfaction with their job or with their working conditions can capture the overall evaluation by workers of their job. While, on average, people with a better working environment report higher job satisfaction, the relationship between the two can vary across population groups and over time.
 - ❖ *Work related feelings*: The quality of the working environment is an important driver of work-related feelings such as being calm, tense, content, relaxed, worried, cheerful, depressed, gloomy, miserable or optimistic. Various job characteristics are closely related to experiencing positive and negative affect. Affect can be asked using questions on whether in the recent past the job has caused workers to experience a number of these feelings, for example using the questions proposed by the *OECD Guidelines on Measuring Subjective Well-Being* (OECD, 2013).
 - ❖ *Work-life balance*: The extent to which some aspects of the working environment affect individuals' well-being also depends on their non-work commitments and responsibilities; this implies that the working environment should be assessed in conjunction with an individual's work-life balance. This can be measured through workers' self-assessment on whether their working hours fit their personal commitments.
 - ❖ *Commuting time*: A long commute to work is one of the main drivers of general well-being. While not a characteristic of one's job, it depends on where the job is undertaken in relation to where the worker lives. This could be measured through a question on the number of minutes per day spent in commuting to and from work.
- **Workers' productivity and organisational commitment**, encompassing questions on:
 - ❖ *Discretionary effort*, i.e. the amount of effort that workers put into their work beyond what is required by their job. Workers in high-quality working environments may go the extra mile and put in more work effort at their discretion, whereas those working in poorer conditions are likely to put in only as much work as is needed. Discretionary effort is a proxy of worker productivity and a driver of a firm's efficiency.
 - ❖ *Commitment*: Workers who enjoy a better working environment are likely to feel more committed to their firms, thus increasing the retention rate and firm productivity.

Question wording

In order to measure the quality of the working environment at the *individual level*, focusing on experienced *outcomes* at work as *objectively* as possible, questions need to be formulated carefully. Each question (or set of questions) should focus on a specific job characteristic that is being measured and ask about the presence of the job characteristic in the respondent's job as factually as possible. In order to achieve this, the question wording can include phrases such as “does your job involve/require...” or “how often in your job do you...”, or statements for agreement or disagreement such as “I might lose my job in the next 6 months” rather than “I am worried about losing my job”.

Double-barrelled formulations that combine a number of characteristics in a single question should be avoided, e.g. the extent to which one's main job involves repetitive hand movements *and* lifting heavy objects – the job may feature the first characteristic only occasionally whereas it may require the latter almost all the time, making it difficult for respondents to answer in a unique way. However, due to space limitations, it may sometimes be necessary to measure more than one job characteristic in a single question. For example, work intensity can take two distinct forms – working at very high speed or working to tight deadlines. Since these two types of intensity are traditionally experienced by different occupational categories (blue-collar workers tend to work at high speed, whereas white-collar ones often work to tight deadlines), both aspects of intensity can be captured in the same question as the “job involves working at very high speed or to tight deadlines” where questionnaire space is limited.

Other considerations regarding question wording include the following:

- Questions measuring the quality of the working environment should follow an initial instruction indicating that the focus is on the *main* and *current* job (not on all jobs that one holds or past jobs that one has held).
- Questions can be asked in question format (e.g. “Do you learn new things in your job?”) or as statements that respondents can agree/disagree with (e.g. “You learn new things in your job”), following an introductory statement such as “To what extent do you agree or disagree with the following statements about your main job?” For factual questions, like those recommended by these *Guidelines*, both question and statement formats work well, provided that they are presented with the appropriate response format.
- Finally, some of the job characteristics that matter the most for the quality of the working environment are experienced infrequently, such as intimidation and discrimination, or training. Questions measuring these kinds of job characteristics should include an appropriate time frame, such as “within the last 12 months”.

Response format

The format and the number of response options are equally crucial for measuring a concept successfully. A well-designed question is both clearly worded and contains a response scale that has discriminatory power. Having too few response options may prevent respondents from fully expressing the quality of their working environment, whereas too many options may increase the cognitive burden on respondents, who may not be able to make finer distinctions between the response categories, thereby lowering the quality of the data. Decisions on response format also include how these options should be labelled, whether the construct should be measured on a unipolar scale (e.g. “not

at all/completely”) or bipolar scale (e.g. “agree/disagree”), and whether they should include the intensity or frequency of the job characteristic experienced.

The choices on response format depend on the survey mode, the length of the survey and the type of concept being measured. For example, lengthy response categories or a large number of response options are more appropriate for self-completion questionnaires with verbal clues (e.g. pen-and-paper or internet-based surveys) compared to interviewer-led surveys (e.g. face-to-face or telephone surveys). Offering different response formats for different questions in lengthy surveys adds to the already long survey completion time, potentially reducing the quality of the responses and increasing the (item or complete) non-response rate. A detailed discussion of response formats based on existing evidence is available in the *OECD Guidelines for Measuring Subjective Well-Being*, which is published as part of this series (OECD, 2013). While evidence on the impact of the response format on survey quality is limited in the case of more factual questions such as those on job characteristics, a number of recommendations from the general survey design as well as from the *Subjective Well-being Guidelines* apply here.

- *Response options should be mutually exclusive and exhaustive.* Respondents should be able to place themselves in the response scale with ease, with options that do not overlap with each other. Since job characteristics are measured mostly on an ordinal (i.e. “agree/disagree”) or numerical scale, rather than through a nominal scale (e.g. types of physical risk factors that the job involves), the mutual exclusiveness and exhaustiveness of the response scale means that the options should include “Don’t Know” and “Refusal” categories as well. In most specialised working conditions surveys that are carried out by an interviewer, these additional options are not read out initially, but recorded by the interviewer if the respondent fails or refuses to provide an answer. This ensures that the respondent puts in the cognitive effort to find the response that best suits his situation, rather than using the “Don’t Know” and “Refusal” categories as default options.⁵
- *Number of response options.* General research on survey design indicates that the appropriate number of response categories offered depends on the nature of these categories (e.g. verbal, numeric or based on sliding scales), the survey length and the survey mode (interviewer-led, presence of visual clues). Bradborn et al. (2004) suggest that, in a verbal setting (with no visual clues), up to five categories should be offered if all the response labels are verbal. Moreover, if all the response categories are qualitatively different (e.g. nominal categories such as types of physical risk factors at work), then the maximum number of responses should be four. For sliding scales (frequency, agreement/disagreement, level of intensity) and with verbal clues such as show cards in interviewer-led questions, or self-administered surveys, up to seven categories can be used. Indeed, the specialised working conditions surveys examined in this chapter offer up to 7 response categories.
- *Dichotomous scales.* Surveys on the working environment sometimes use dichotomous response scales (with “Yes/No” answers), as in the case of some of the questions in the European Working Conditions Surveys (e.g. questions on autonomy and task discretion) and the French *Enquête Conditions de Travail*. While in these types of long surveys the use of dichotomous scales can reduce the cognitive burden and survey duration, and thus the survey cost, job characteristics that are measured as part of the quality of the working environment are experienced in varying degrees. For both the quality assurance of statistics on the working environment and for capturing the variation across individuals it

is important to design questions with finer differentiated response scales. Therefore, these *Guidelines* recommend avoiding dichotomous response scales as much as possible.

- **Labelling scale options.** Response scales can be labelled in various ways, based on whether scale anchors are provided only at the two ends of the scale (and, if so, whether to label these end points) or verbal labels are offered to all response options. While research shows that how the scales are labelled affects the distribution of responses (e.g. Conti and Pudney, 2011, on the job satisfaction question in the British Household Panel Study), it is not clear which strategy produces the highest quality data. Some authors have argued that verbally labelling all response options helps to clarify their meaning and leads to more stable responding (Alwin and Krosnick, 1991), while others suggested that verbally labelled scales, compared to numerical scales with end-points anchored by labels, pose translation challenges because of the cultural and linguistic differences that affect how verbal scales are interpreted in different countries (Veenhoven, 2008). Due to the factual nature of the questions recommended in these *Guidelines*, these concerns apply to a lesser degree, depending on the survey mode. The most common practice in the surveys examined in Chapter 2 and in the OECD inventory is to provide response labels for all options when the number of response categories is seven or below and when show cards are available. Whatever the choice made, what matters the most is the consistency of the format for scale-labelling throughout the survey (as much as possible), across years, across countries, and in mixed-method surveys across survey modes.

Length of survey

Surveys that are used to collect information on the working environment are often very lengthy, with their length depending on the survey mode(s), type of questions and respondent characteristics. Face-to-face interviews often take a longer time to complete, whereas surveys with a self-completion component are typically shorter. For instance, the average duration of the 6th European Working Conditions Survey (Eurofound, 2016), which is conducted face-to-face at respondents' homes, is 45 minutes, ranging between 38 minutes in Albania and 56 minutes in Denmark. The Finnish Working Life Barometer, which is conducted via Computer-Assisted Telephone Interviewing, takes 22 minutes on average.

While there is no concrete information available on the duration of questions directly measuring the quality of the working environment, it is possible to provide an estimate for the questionnaire modules proposed in Annex 6.A of these *Guidelines*. The extended module, which includes 25 questions, is expected to take about 6½ minutes to answer; the condensed module of 13 questions about 3½ minutes; and the core module containing 4 questions about 60 seconds.

Target sample and sampling

Measures of the quality of the working environment are compiled more easily if they refer to the current job, rather than to previous jobs. This implies that, when measuring the quality of the working environment, the target population should be the working-age population engaged in paid work. This also implies that the survey vehicle used for measuring the working environment should ask questions on the age of respondents, as well as their sector of economic activity, to select those who do paid work for interviewing, or to filter the working environment questions for those who currently do paid work.

The definition of the working-age population varies across countries depending on the education system and statutory retirement age. For example, European Working

Table 6.3. **Average length of surveys covering the quality of the working environment**

| Country | Name of the Survey | Average duration or length |
|-----------------|---|--|
| Austria | Work Climate Index | .. |
| | Reconciliation of work and family: Module of the Microcensus 2010 | 22 questions. |
| | Occupational accidents and work-related health problems: Module of the Microcensus 2007 | 17 questions. |
| Bulgaria | National Working Conditions Survey in Bulgaria | Between 30 and 60 minutes. |
| | Work Climate Index | Between 55-60 minutes. |
| Czech Republic | Quality of working life | 32 questions in 2005, 60 in 2006. |
| | Value of health | 129 questions. |
| | Our society 2008 | 70 questions in total, of which 4 plus 2 multi-item questions related to working conditions. |
| Denmark | Danish Work Environment Cohort Study (DWECS) | 55-62 questions. |
| | Working Environment and Health in Denmark 2012-2020 (WEHD) | 55 questions. |
| Estonia | Estonian Working Life Survey | 30 minutes, most between 20 and 40 minutes. |
| | Employment Contract Act Survey | 45 to 60 minutes. |
| Finland | Finnish Quality of Work Life Survey | 60 minutes. |
| | Working Life Barometer (WLB) | 22 minutes. |
| | National Finnish Work and Health Survey | 31 minutes. |
| | MEADOW | 22 minutes for the employer survey and 24 minutes for the employee survey. |
| France | Working conditions surveys | 1 hour 45 minutes. |
| | Medical Monitoring Survey of Professional Risks | 70 questions for patients, 153 questions for medical officers. |
| | BIBB/BAuA – Employee Survey | 40 minutes. |
| Germany | German Socioeconomic Panel Study | 30 to 40 minutes for individuals, or 80 to 90 minutes for two people or a household. |
| Greece | Survey on Reconciliation between Work and Family Life (2010 AHM) | Not available. |
| | Survey on Employment of Disabled People (2011 AHM) | Not available. |
| Italy | Quality of work survey | 25 minutes. |
| | Survey of changes in work | 65 questions. |
| | PLUS – Participation, labour, unemployment survey | 22 minutes. |
| Slovak Republic | Information System on Working Conditions (ISWC) | 1 hour 20 minutes. |
| Spain | National Survey on Working Conditions | 27 minutes. |
| | National Survey on Quality of Life in the Workplace | 101 questions. |
| Sweden | The work environment | 105 questions. |
| | Work-related disorders | 5-10 minutes. |
| United Kingdom | Skills and Employment Survey (2012) | 59 minutes. |
| | Workplace Employment Relations Survey (WERS) | 90 minutes with senior management. |

Source: Adapted from Cabrita and Peycheva (2014), *National working conditions surveys in Europe: A compilation*. Luxembourg: European Foundation for the Improvement of Living and Working Conditions.

Conditions Surveys cover a broad age range, starting with those who are 15 and older;⁶ conversely, the definition of working age is limited to those aged 20 to 65 in the 2012 British Skills and Employment Survey,⁷ while the Danish Work Environment Cohort Study samples those who are between 18 and 59. Table 6.4 provides details on how the target population is identified in different national working-conditions surveys.

While surveys have different definitions for what counts as paid work, specialised surveys on working conditions use the self-reported job status, in which the individual works a certain number of hours per week. For example, both the European Working Conditions Surveys and the British Skills and Employment Surveys use the criterion of having worked at least one hour in the reference week of the survey, whereas the Finnish Quality of Work Life Survey selects individuals if they work 10 hours or more per week. Therefore, people are selected in the sample if they worked at least the specified number of hours within the past

week, and reply to the questionnaire based on the main job that they did in the last week. (See Box 6.5 for instructions on how to identify eligible respondents in the British Skills and Employment Survey.) Once the eligibility criterion is established, the sampled households are screened to identify eligible respondents. Where more than one household member is in the specified age band and in paid work, one of them is selected to participate randomly, for example using the Kish grid selection process.⁸ In such cases, selecting one eligible household member, rather than interviewing all eligible members, will ensure that individuals clustered in the same household do not bias the sample so that it remains representative of the working population.

The issue of proxy respondents

A proxy respondent is someone who reports on the properties or activities of another person in a survey. Proxy respondents are frequently used in household surveys such as labour-force surveys, as well as in population censuses, as an alternative to interviewing all household members when individual interviews are either impractical (e.g. children aged 14 or less) or impossible (e.g. the eligible member not being present at the time of the interview). At least for the adult population, it is clearly preferable to collect the information directly from the selected individual, yet proxy responses are not necessarily inferior if the self/proxy discrepancy in answers is negligible. This depends on the nature of the relationship between the proxy and the individual, the type of information needed and the cognitive effort required to answer the question. For example, the accuracy of information collected from spouses on household expenditures tend to be high; however, it will not be as good on topics that involve knowledge of the targeted individual's practices and activities outside of the household.

Proxy respondents are problematic for collecting information on job characteristics for a number of reasons: 1) the information may not be available to the proxy; 2) the proxy's answers could be primed by their own work life; 3) the proxy may not have the cognitive capacity to answer work-related questions; 4) the proxy may face the double burden of answering about both their own work life and that of the target person; and 5) proxy respondents are distributed non-randomly across households.

First, in most cases, paid work takes place outside of the household where the target individual spends a substantial part of the day. Even though household members, especially spouses, tend to talk about their workday when returning home from work and are fairly knowledgeable about the daily routines, colleagues, deadlines or important meetings of other members of the same household, they do not have a full account of the job that they perform. Household members, or spouses, are also likely to avoid talking about work at home in order to establish a work-life boundary. This is not only true for negative aspects of their work, since a negative mood can be contagious, but also for positive aspects. People may avoid drawing a too rosy picture of their work activity to other household members, especially to their partners, in order to prevent looking too happy outside the home. Household members can have not only an incomplete picture of other members' work life but also an inaccurate picture of it.

Second, even if hypothetically the proxy has full knowledge about the job characteristics of the target person, answers by the proxy can be primed by his/her own work experience. When this is the case, the proxy takes their own work as the reference point and reports on the target person's job in relation to their own. This could hamper the quality of responses, particularly for items with ordinal scales with degrees of agreement or

Table 6.4. Target population in selected national working conditions surveys

| Country | Name of the Survey | Target Population |
|-----------------|---|--|
| Austria | Work Climate Index | All gainfully employed people, self-employed people were exempt. |
| | Reconciliation of Work and Family: Module of the Microcensus 2010 | Residential population in private households aged between 15 and 64. |
| | Occupational accidents and work-related health problems: Module of the Microcensus 2007 | Residential population in private households aged 15 and over who were either in employment at the time of interview or have ever been in employment. |
| Bulgaria | National Working Conditions Survey | Employees working in companies with 6 or more employees. |
| | Work Climate Index | The working population aged 15 and over, employed including working students and pensioners. |
| Czech Republic | Quality of Working Life | Economically active inhabitants over age 15. |
| | Value of Health | Economically active inhabitants aged 17 and over, including employees, self-employed and entrepreneurs. |
| | Our Society 2008 | Population over the age of 15. |
| Denmark | Danish Work Environment Cohort Study (DWECS) | Population aged 18 to 59. |
| | Working Environment and Health in Denmark 2012–2020 (WEHD) | Active population aged 18–64 employed or self-employed. |
| Estonia | Estonian Working Life Survey | 1. Organisations with at least 5 employees 2. Employees working at an organisation with at least 5 employees. |
| | Employment Contract Act Survey | 1 Employers: Organisations with at least 5 employees. 2. Employed and unemployed people. |
| Finland | Finnish Quality of Work Life Survey | 15–64-year-old employees who normally work 10 or more hours per week. |
| | Working Life Barometer (WLB) | Employees aged 18 to 64 who normally work 10 or more hours a week. |
| | National Finnish Work and Health Survey | 20–68-year-old employees and self-employed people working at the time of the study. |
| | MEADOW | Private and public-sector organisations that employ 10 or more employees and 1 or 2 randomly selected workers in these organisations. |
| France | Working Conditions Survey | 1. <i>In employment</i> : Everyone who has a job. 2. <i>Employers</i> : Employers of those employees if the establishment employs 10 or more people, plus sample of public and private establishments having 1 or more employee. |
| | Medical Monitoring Survey of Professional Risks | All employees. |
| Germany | BIBB/BAuA – Employee Survey | Employees aged 15 and over, working in a paid job for 10 or more hours a week People of migrant background are covered if they have the language skills to answer the questions. Apprentices in vocational training, students or interns are excluded. |
| | German Socioeconomic Panel Study (SOEP) | All household members, including nationals with a migrant background and foreigners. |
| Greece | Survey on Reconciliation between Work and Family Life (2010 AHM) | People aged 15 to 64 living in private households, and non-residents staying in the country for at least one year. |
| | Survey on Employment of Disabled People (2011 AHM) | People aged 15 to 64 living in private households, and non-residents staying in the country for at least one year. |
| Italy | Quality of Work Survey | The employed population above the age of 16. |
| | Survey of Changes in Work | All employed people. |
| | Participation, Labour, Unemployment Survey | Population aged 18 to 75. |
| Slovak Republic | Information System on Working Conditions (ISWC) | Employers in all sectors and regions. |
| Spain | National Survey on Working Conditions | Employees and self-employed population aged 15 or more. |
| | National Survey on Quality of Life in the Workplace | All of the working population (aged 15+), both employees and self-employed. |
| Sweden | The Work Environment | Employed population aged 16 to 64 years. |
| | Work-related Disorders | Employed population aged 16 to 64 years. |
| United Kingdom | Skills and Employment Survey | People aged 20-65 living in private households; currently in a paid job working for 1 or more hours a week, including self-employed. |
| | Workplace Employment Relations Survey (WERS) | Employers and employees in workplaces with 5 employees or more. |

Note: The sampling frame and strategy differ if the measures of the quality of the working environment are collected via household surveys such as the labour-force surveys. Sampling frames in household surveys tend to be broader – such as all individuals within a certain age range (e.g. 18-74) living in private dwellings. Individuals in selected households are then all interviewed, either directly or using proxy respondents, when the household member selected is not present at the time of the interview.

Source: Adapted from Cabrita and Peycheva (2014), *National working conditions surveys in Europe: A compilation*. Luxembourg: European Foundation for the Improvement of Living and Working Conditions.

Box 6.5. Instructions to interviewers for determining eligibility to participate in the British Skills and Employment Survey

“Our target population is people aged 20-65 who are in paid work. It doesn’t matter if they are employed or self-employed, full-time or part-time, as long as they are paid for their work and do at least one hour a week. In most cases, the distinction between eligible and ineligible should be easy to determine, since the criteria for selection are relatively simple (i.e. in paid work at least one hour a week). To follow are some examples of cases in which the situation would be less clear-cut and tips on how to handle each:

- *Someone claiming an unemployment benefit.* This person might say to you “I’m on the dole, so it’s not relevant to me”. Please remember that (a) many people who claim benefit also do work, often legally, and (b) benefit status is not an issue for this study – we are only interested in the paid work that people are doing. So it is perfectly possible that someone in this situation would be eligible (although you should obviously be tactful when probing further – we don’t want people to think we are checking up on them).
- *Someone doing voluntary work.* Unless (s)he is also doing paid work, this person would be ineligible. Some voluntary workers do get their expenses reimbursed, but if that is the extent of *payment*, (s)he would still be ineligible.
- *Someone who is on holiday/maternity leave/sick leave.* As long as the job has not come to an end as a result of the period of absence, (s)he would be eligible. Please note: long-term sick leave is defined as 6 months or more for this survey; if a person has been off sick for less than 6 months, they are eligible; for longer periods of sick leave please check with head office.
- *Someone on a period of unpaid leave or a sabbatical.* If the respondent feels that (s)he still has a job to go back to at the end of the period of unpaid leave, (s)he is eligible.
- *Someone who has an irregular job* (i.e. doesn’t work a regular number of hours, or doesn’t work every week). If the job is ongoing, this person is eligible, even if (s)he hasn’t worked in the seven days prior to interview. So, for example, an oil rig worker who works one week on, one week off would be eligible. (For the purposes of the survey, you can treat the week they do not work as holiday.) However, the minimum eligibility requirement for someone who works irregularly is that they must have worked at least once in every two weeks. So, for example, a self-employed gardener who works for 7 hours one Saturday every month would be ineligible.
- *Someone who has a domestic arrangement whereby (s)he is “paid” to keep house.* Some couples have an arrangement whereby one partner has an earned income, and the other takes a share of that income as “payment” for keeping the home running. In most cases, the “housekeeping” partner would be ineligible, unless the arrangement is so formal as to have some kind of contract.
- *Someone who is paid but does not work* (e.g. a non-executive Director of a company who gets a wage but only has to, say, sit in on a Board meeting once a year). Assuming this person has no other paid work, (s)he would be ineligible... they are not satisfying the *at least one hour paid work a week* rule.
- *Someone who works in a family business but does not draw a wage.* In this instance, you would have to leave it up to the respondent to decide whether or not (s)he gets any pay or financial profit from the work (s)he does in the business. If so, (s)he is eligible, if not, (s)he is ineligible.
- *Someone who is almost 20 or only just turned 66, and in work.* You must take the date that eligibility is established as the cut-off point for eligibility. If the person is not within the required age range on that date, (s)he is ineligible.
- *Someone who says they were made redundant last week.* You should check whether they did any paid work for at least one hour last week. If they did so, they are eligible. Another rare situation would be if someone was eligible (i.e. in paid work) on the date that eligibility is established, but when you came to do the interview, his/her job had come to an end. In that situation, you should do your best to persuade her/him to do the interview on the basis of the job (s)he was doing at the time of selection. We appreciate that this might not be easy, particularly if the loss of job was a traumatic experience, but do your best and withdraw tactfully if necessary.

Box 6.5. Instructions to interviewers for determining eligibility to participate in the British Skills and Employment Survey (cont.)

- Someone who has been made redundant but has been “paid off” rather than work their notice (sometimes known as “on gardening leave”). It depends on how recently they were paid off; check whether they did any paid work for that employer for at least one hour last week in the last week – if they did so, they are eligible, if not, they are ineligible.
- Someone who has been suspended from work pending a decision. If they expect to return to their job (for at least one hour per week) and the duration of their suspension is less than 6 months at the time you talk to them, they are eligible. For all other cases, please check with head office”.

Source: Skills and Employment Survey 2012 – Technical Report, pages: 129-131.

disagreement. For instance, in the case of questions on the difficulty of taking a few hours off to take care of personal matters, when the proxy has (or used to have) a very strict line manager and cannot easily take time off herself or himself, they could report that the target has no difficulty in taking a few hours off, even when in reality the target person may find it difficult. Another example is work intensity: when the proxy works with little work intensity, it may appear to him/her that the target individual works with a very high intensity when, in reality, the target’s job only occasionally involves tight deadlines or time pressure. In other words, people’s own assessment may sometimes reflect the comparisons they make between their own work conditions and those of other household members.

Third, if the proxy has never been in paid employment or in an office space, some of the questions on job characteristics may not resonate well in their cognitive processing. This does not necessarily reflect a lack of knowledge of the target individual’s work, but rather the difficulty for proxies to relate to the situations addressed by the questionnaire. An example of this could be questions on organisational structure or management practices, where the proxy respondent is asked to quantify, for instance, the latitude the target individual has in decisions regarding the company’s future. Even if the proxy has extensive information on the daily work of the target respondent, some aspects of work cannot be understood by those outside the labour market.

Fourth, using proxy respondents may increase the response burden to the proxy, if they are interviewed in the survey as well. Questionnaires specially designed to measure working conditions, as well as broader surveys that can be used to measure the quality of the working environment, tend to be lengthy. If the same respondent is interviewed both on behalf of themselves and on behalf of non-present household members, the quality of the responses can be heavily compromised.

Finally, beside the issues related to the ability of the proxy to respond to the questions properly, the probability of relying on a proxy respondent for the targeted individuals is not distributed randomly. Proxy respondents are distributed non-randomly across the type of jobs held by the target population. In other words, certain target individuals are more likely to be absent at the time of the interview, and thus to be *proxied*. People who work fewer hours, or who work from home at least certain days of the week, are less likely to be absent, whereas those who work long hours or have demanding jobs are more likely to be absent when contacted for a survey. For this reason, when measuring the quality of the working environment, the inclusion of proxy respondents in the survey generates a non-random sample and estimates that are not representative of working individuals.

Because of these considerations, information on the quality of the working environment should be collected through surveys with a sampling strategy that involves selecting and interviewing *only* those individuals who are in paid work, while avoiding proxy respondents when the target individual is not available for interview. However, many surveys, including labour-force surveys and some social surveys, collect the information at the household level and rely on proxy respondents when targeted household members are not present at the time of the interview. When these types of surveys are used as a vehicle to collect information on the quality of the working environment, questions on the working environment should not be directed to proxy respondents, and should be collected only from the sampled individuals who are present. When the quality of the working environment is measured using household surveys, the implications of non-random selection due to some household members not being present at the time of interview should be further investigated.

Place of interview

Even though the focus of questions on the working environment is the workplace, surveys that measure this phenomenon should be administered outside of workplaces, as any association with someone's workplace and/or employer may bias responses. Also, not all types of work are carried out in environments that are conducive to completing an interview. For example, the quality of an interview at the workplace would differ significantly between truck drivers, who spend a large proportion of their time behind the wheel, and clerks, whose work takes place behind the desk. Interviewing all respondents at their homes will eliminate this heterogeneity arising from differences in the interview location.

In the case of face-to-face interviews, it is recommended that the interview take place at the respondent's home and is administered by independent interviewers. If the survey is delivered by mail, it should be addressed to the individual's home address, whereas in the case of e-surveys, the questionnaire should be sent to personal e-mails, rather than to corporate e-mail addresses.

Existing survey vehicles that collect information on the quality of the working environment – namely the European and national working conditions surveys, labour force surveys and general social surveys – follow this practice and interview respondents at their residence (Table 6.5).

Frequency of enumeration

The quality of the working environment is affected by social and economic changes, implying that data on it should be collected on a regular basis. Business cycles affect both the quantity and quality of jobs, by changing the power relations between employer and employees, the composition of workers in terms of age, gender and skills, the number of jobs in different industries, the type of contracts for the jobs being created or destroyed, the hours of work that individuals need to perform to meet demands for their product – all factors that could lead to changes in the working environment. Similarly, technological change affects how work is organised, with implications for the intensity of the tasks that are carried out. Changes in policies also impact on the working conditions; for example, policies that erode the strength of trade unions can affect fringe benefits, maximum work hour regulations and workers' participation in organisational decision making. Therefore, the quality of the working environment should ideally be measured on a regular basis so as to allow monitoring changes in working conditions over time (see Box 6.6 for evidence on changes in work intensity since the crisis).

Table 6.5. **Place of interview in selected national working conditions surveys**

| | Name of the Survey | Location of the interview |
|------------------------|---|--|
| Austria | Work Climate Index | The interviews are conducted face to face at home. |
| | Reconciliation of work and family: Module of the Microcensus 2010 | Face-to-face CAPI interviews carried out at home. |
| | Occupational accidents and work-related health problems: Module of the Microcensus 2007 | Face-to-face CAPI interviews at home. In cases where household members were not present, the interviews were conducted via CATI telephone interviews. |
| Bulgaria | National Working Conditions Survey in Bulgaria | Various tools and data sources were used during the fieldwork, which took place at the enterprise at which employees, employers and health officers were based. |
| | Work Climate Index | Standardised face-to-face interviews using show cards in private households. |
| Czech Republic | Quality of Working Life | Face-to-face interview at home. |
| | Value of Health | Face-to-face interview at home. |
| | Our Society 2008 | Face-to-face interview at home. |
| Denmark | Danish Work Environment Cohort Study (DWECS) | Respondents were contacted at their home, either by mail or telephone, to fill in telephone or online questionnaires. |
| | Working Environment and Health in Denmark 2012–2020 (WEHD) | Online Survey, and postal questionnaire. |
| Estonia | Estonian Working Life Survey | In most cases, the interview took place in the employee's home or other (public) location preferred by the interviewee (interviewing in the workplace was avoided). |
| | Employment Contract Act Survey | In most cases, the interview took place in the interviewee's home or other (public) location preferred by the interviewee (workplaces are avoided). Most of the interviews lasted around 60 minutes. |
| Finland | Finnish Quality of Work Life Survey | Face-to-face interviews at home or elsewhere. |
| | Working Life Barometer (WLB) | CATI. |
| | National Work and Health Survey | CATI. |
| | MEADOW | CATI. |
| France | Working Conditions Survey | <i>In employment</i> section completed through CAPI interviews with 1 or 2 household members, conducted by INSEE researchers equipped with a computer visiting the homes of survey participants. The last part of the interview comprises a section for self-completion with headphones. |
| | Medical Monitoring Survey of Professional Risks | At physicians' offices. |
| Germany | Employee Survey (BIBB/BAuA) | Telephone interview, at home. |
| | German Socioeconomic Panel Study | PAPI and CAPI interviews conducted at the interviewee's home. |
| Greece | Survey on Reconciliation between Work and Family Life (2010 AHM) | Face-to-face interviews, at private households with paper questionnaire or by telephone. |
| | Survey on Employment of Disabled People (2011 AHM) | Face-to-face interviews, at private households with paper questionnaire or by telephone. |
| Italy | Quality of Work Survey | CATI interviews, at home. |
| | Survey of Changes in Work | About 5 000 interviews were collected using a CATI methodology, while about 500 were collected online. |
| | Participation, Labour, Unemployment Survey | CATI, at home. |
| Slovak Republic | Information System on Working Conditions | By telephone, online and post. Questionnaires filled in at the workplace. |
| Spain | National Survey on Working Conditions | Face-to-face interviews at the interviewee's home using a tablet PC, and PAPI or a paper questionnaire. |
| | National Survey on Quality of Life in the Workplace | The interviews are carried out by phone, using the CATI system. The interviews are carried out in person through the CAPI system only when it is not possible to get in touch with the contacts on the phone. |
| Sweden | The Work Environment | Structured CATI interviews followed by a postal or web questionnaire. |
| | Work-related Disorders | CATI interviews conducted as an addition to the LFS. |
| United Kingdom | Skills and Employment Survey | CAPI and CASI, at individuals' homes. |
| | Workplace Employment Relations Survey | The employee questionnaire was completed online or on paper by up to 25 employees in participating workplaces. |

Source: Adapted from Cabrita and Peycheva (2014), *National working conditions surveys in Europe: A compilation*. Luxembourg: European Foundation for the Improvement of Living and Working Conditions.

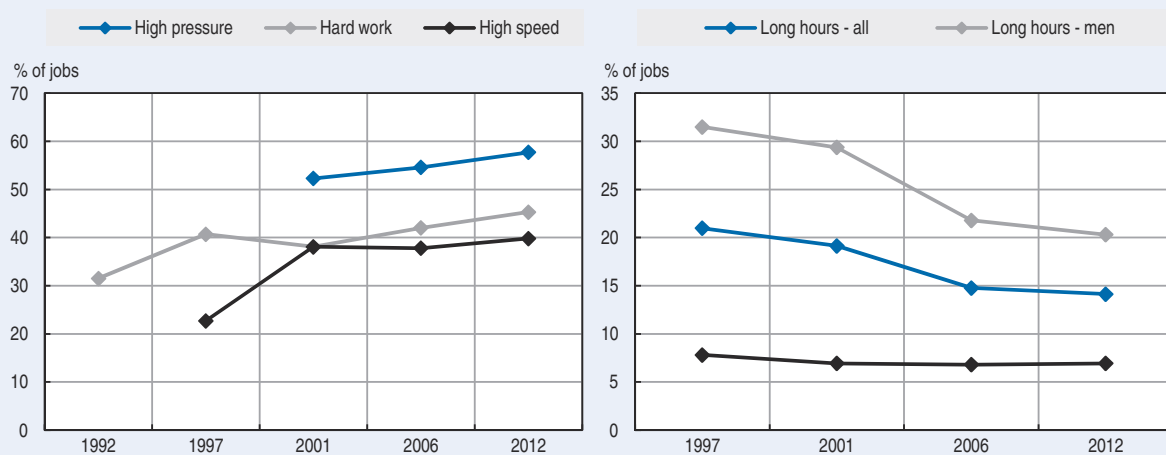
Well-established specialised working conditions surveys such as the European Working Conditions Survey, the French *Enquête Conditions de Travail* and the British Skills and Employment Surveys have been carried out on a regular basis since 1991, 1978 and 1986, respectively. The EWCS is repeated every 5 years, the French survey every 7 years and the British survey every 4 to 6 years.

The frequency of these surveys allows the monitoring of changes in the quality of the working environment. However, since they require advance planning, preparatory work and funding, there is no flexibility in their scheduled timing. In the presence of unexpected changes in the business cycle or in government policies, it is not possible to schedule a specialised working conditions survey to capture the consequences of these changes. Some of the immediate changes in working conditions, which may materialise after a few years, can be completely missed, depending on the scheduled intervals of the large-scale working conditions surveys. Therefore, the quality of the working environment should also be monitored with a core set of questions on a more regular basis. These core questions (see Annex 6.A for question recommendations) should be incorporated in labour force surveys or general social surveys and ideally collected on an annual or quarterly basis.

Box 6.6. Trends in work intensity in the United Kingdom and the United States

The prevalence of jobs requiring hard work increased in the United Kingdom by over 9 percentage points between 1992 and 1997, remained constant from 2001 to 2006, and increased again by around 3 points from 2006 to 2012. Both periods of increases in work intensity followed recessions, providing some circumstantial support to the view that employers use recessions to ratchet up effort levels. The increase in work intensity recorded in 1992-97 is highlighted by workers' self-reports of working at very high speeds. In 1997, 23% of respondents reported that they worked at very high speeds three-quarters or more of the time; by 2001, this share had risen to 38%, and by 2012 to 40%. Similarly, the increase in work intensity is reflected in the higher share of respondents who reported that they worked under tight deadlines, whose share increased from 52% in 2001 to 55% in 2006 and 58% in 2012 (Felstead et al., 2013).

Figure 6.1. Trends in work intensity, United Kingdom



Source: British Skills and Employment Surveys series.

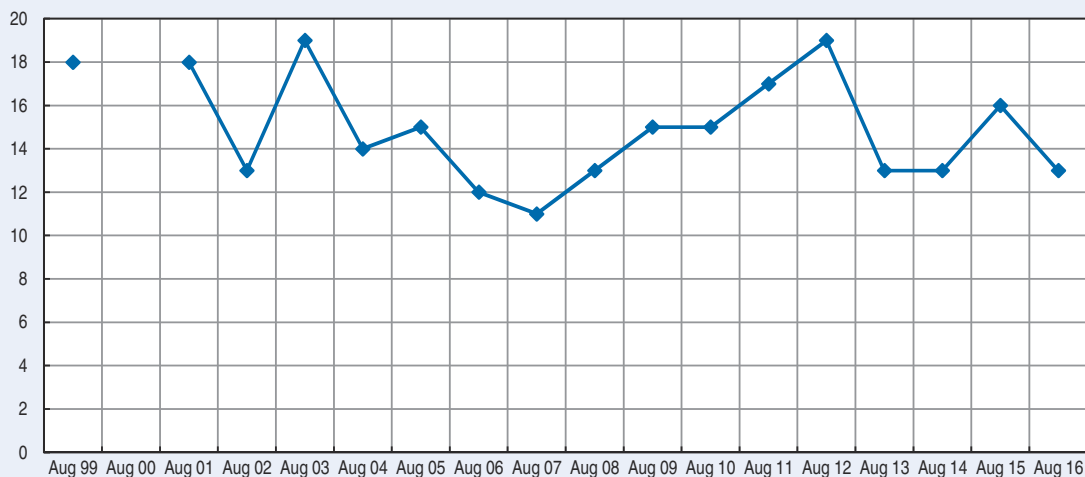
StatLink  <http://dx.doi.org/10.1787/888933606300>

“Hard” annual data on workers’ experience of work intensity are rare. The Gallup Poll’s yearly satisfaction questions on work and the workplace in the United States highlight changes in workers’ satisfaction with


Box 6.6. Trends in work intensity in the United Kingdom and the United States (cont.)

the amount of work that is required of them. When comparing workers' dissatisfaction with their workload before the 2007/08 financial crisis and in the 5 years after it, the share of those who are dissatisfied with the amount of work required of them increased from 11% in 2007 to 19% in 2012. The data also show a reduction in subjective work intensity between 2003 and 2007, implying that some of the post-crisis increase in work intensity could simply reflect a rebound from the previous decline.

Figure 6.2. Trends in work intensity, United States
Percentage dissatisfied with the amount of work that is required of them



Source: Gallup Inc. (2017), Adults employed full time or part time.

StatLink  <http://dx.doi.org/10.1787/888933606319>

6.5. Conclusion

The working environment should be measured following three principles: at the individual level, with a focus on outcomes, as well as on objective aspects that are observable by a third party. To achieve these objectives, the key methodological considerations discussed in this chapter are as follows:

- Where possible, primary sources of data should be preferred over secondary ones. The most appropriate data sources are sample surveys that represent people with jobs. Qualitative interviews, as well as direct observations of a worker's routine, should be used when the focus is exploratory or on a particular group of the population, such as workers in a specific occupation.
- The preferred unit of analysis should be the individual, rather than the firm or the country. Firm-level data provide a shortcut to measuring the quality of the working environment to the extent that management and HR practices influence working conditions; however, each worker experiences his/her job in a unique way, implying that firm-level information may conceal differences across workers. Similarly, country-level information can be useful to analyse changes over time, and to compare countries, yet it is not detailed enough to reflect the multidimensionality of the working environment. Measuring the quality of the working environment at the individual level enables individual differences in the experienced quality of work to be reflected and captures the cumulative effects and trade-offs between various job characteristics. Implementing

such measures requires conducting representative surveys of all workers as well as surveys of workers within individual firms.

- The quality of the working environment is as relevant to the self-employed as it is to employees; thus, self-employed individuals should not be excluded from surveys designed to measure the quality of the working environment. Carefully worded questions that refer to the job rather than to firm-specific practices allow the same questions to be asked of both employees and self-employed workers. However, surveys should also contain questions to identify the self-employed, who are often self-selected into jobs with specific job characteristics, such as autonomy. An analysis of the data on the quality of the working environment should take into account the employment status of workers.
- The questions specifically measuring the quality of the working environment should be complemented with a set of contextual questions. These questions should cover eligibility (e.g. paid work, main job and employment status), demographic characteristics (e.g. age, gender and ethnicity), as well as employment (e.g. job tenure, occupation and industry) and contract characteristics (e.g. temporary or permanent contracts, work hours). Additionally, for analytical purposes, it is recommended that the questionnaire include items on workers' well-being outcomes and their at-work productivity.
- Survey questions on the quality of the working environment do not lend themselves to being answered by proxy respondents. Surveys that are used for measuring working conditions should hence not rely on proxy respondents. If the survey vehicle that contains questions on the working environment allows proxy responses in its design, skip patterns should be used to prevent proxy respondents from providing answers to these questions.
- The survey mode can affect the quality of statistics on the working environment. Self-administered surveys (telephone or internet surveys) produce lower response rates and higher non-completion rates than interviewer-led surveys. Additionally, individuals respond more negatively to questions of a subjective nature in self-administered surveys. Factual questions – as recommended in these *Guidelines* – are less likely to be affected by survey mode effects.
- The sample for surveys measuring the quality of the working environment should be representative of the working population. The most appropriate sampling frame is represented by all individuals (within an age band) who have done paid work in the reference week of the survey. However, household surveys or general social surveys with a sampling frame that covers all people living in private households can also be used for measuring the quality of the working environment. In these cases, sample weights should be applied in order to correct for over-representation of the members of the same household.
- The quality of the working environment responds to business cycles and to social and technological change. This implies that statistics on the quality of the working environment should be collected on a regular basis. If collected approximately every five years, specialised working conditions will capture major changes in the quality of the working environment. More frequent (i.e. annual or quarterly) collection of core questions on the working environment in general surveys, on the other hand, would allow working conditions to be closely monitored for policy action.

Notes

1. Except for Greece, Ireland, and Luxembourg and the Netherlands in 1991; Luxembourg in 1996; Malta and Romania in 2001; and Estonia, Luxembourg, Malta and Slovenia in 2005.
2. In the near future, the EU-LFS will be re-organised with rotating modules repeated every eight years. A number of questions from various AHMs could be brought together to form a special module on the quality of the working environment; a possible condensed set of these questions is provided in Annex 6.A of this chapter.
3. The cross-country comparability of OSHA data on non-fatal work accidents is, however, limited due to differences across countries in the length of the period of absence from work reported to OSHA, the definition of accidents (as compared to absences from work due to working conditions affecting workers' health), the financial compensation provided (which will influence a worker's propensity to report the absence as accident-related), etc.
4. According to labour-force survey data, the share of workers holding multiple jobs in Europe and the United States ranged in 2012 from 8.5% in the Netherlands to 1.4% in Italy, with an average value (across 26 OECD countries) of 4.5%. A higher prevalence of multi-job holders is recorded in the OECD Adult Skills Surveys, with the share of workers holding multiple jobs ranging from 17.2% in Chile to 3.2% in Italy, and an average value (across 30 OECD countries) of 7.8%.
5. A similar mechanism of encouragement does not exist in web surveys, and whether or not the "Don't Know/Refusal" category is offered may significantly affect item non-response patterns. If the option for no response is not provided, respondents may randomly pick a response category, or even leave the questionnaire completely. If it is offered, especially for sensitive or cognitively burdensome questions, respondents are more likely to simply select the "Don't Know/Refusal" category. The quality of the working environment questions is not necessarily sensitive, and since they are about a respondent's daily work, they are not burdensome either – especially if they are well-designed. Therefore, it is not necessary to present a "Don't Know/Refusal" category in web surveys on the quality of the working environment. However, a "Doesn't apply" category should be presented to the respondents.
6. People 16 and over in Bulgaria, Norway, Spain and the United Kingdom.
7. The age coverage of the British Skills and Employment Survey was 20 to 60 in the 1986, 1992, 1997 and 2001 waves of the survey; this was raised to 20-65 in 2006 in order to reflect changes in the retirement age.
8. Kish (selection) grid is a method used for randomly selecting members within a household for interview, with each member having an equal probability to be selected (Kish, 1965).

References

- Alwin, D.F. and J.A. Krosnick (1991), "The reliability of survey attitude measurement: The influence of question and respondent attributes", *Sociological Methods and Research*, Vol. 20, No. 1, pp. 139-181.
- Booth, A.L. and J.C. van Ours (2008), "Job satisfaction and family happiness: The part-time work puzzle", *The Economic Journal*, Vol. 118, No. 526, pp. 77-99.
- Bradborn, N., S. Sudman and B. Wansink (2004), *Asking questions: The Definitive Guide to Questionnaire Design – from Market Research, Political Polls, and Social and Health Questionnaires*, Jossey-Bass, San Francisco.
- Cabrita, J. and D. Peycheva (2014), *National Working Conditions Surveys in Europe: A Compilation*, Publications Office of the European Union, Luxembourg, European Foundation for the Improvement of Living and Working Conditions.
- Conti, G. and S. Pudney (2011), "Survey design and the analysis of satisfaction", *The Review of Economics and Statistics*, Vol. 93, No. 3, pp. 1087-1093.
- Department of Trade and Industry, Employment Markets Analysis and Research et al. (2014), *Workplace Employee Relations Survey, 2004; Cross-Section Survey, 2004 and Panel Survey, 1998-2004, Wave 2, 5th Edition*, SN: 5294, UK Data Archive, Colchester, Essex, January.
- Dex, S., A. McCulloch and C. Smith (2002), "Employees' awareness of employers' flexible working arrangements", *Research Papers in Management Studies*, No. 2002/2, Judge Institute of Management, Cambridge University, Cambridge.

- Eaton, S.C. (2003), "If you can use them: Flexible policies, organisational commitment, and perceived performance", *Industrial Relations*, Vol. 42, No. 2, pp. 145-166.
- Eurofound (2016), *6th European Working Conditions Survey Technical report*, Publications Office of the European Union, Luxembourg.
- Eurofound (2015), *Third European Company Survey – Overview Report: Workplace Practices – Patterns, Performance and Well-being*, Publications Office of the European Union, Luxembourg.
- Felstead, A. et al. (2013), "Work intensification in Britain: First findings from the Skills and Employment Survey 2012", Centre for Learning and Life Chances in Knowledge Economies and Societies, Institute of Education, London.
- Fleischer, L., C. Smith and C. Viac (2016), "A review of general social surveys", *OECD Statistics Working Papers* No. 2016/09, OECD Publishing, Paris, <http://dx.doi.org/10.1787/bb54d16f-en>.
- Gallup Inc. (2017), *Work and Workplace Indicators*, www.gallup.com/poll/1720/work-work-place.aspx (accessed on 28 July 2017).
- Hayman, J.R. (2009), "Flexible work arrangements: Exploring the linkages between perceived usability of flexible work schedules and work/life balance", *Community, Work & Family*, Vol. 12, No. 3, pp. 327-338.
- Inanc, H. et al. (2015), "Direct participation and employee learning at work", *Work and Occupations*, Vol. 42, No. 4, pp. 447-475.
- Kish, L. (1965), *Survey Sampling*, John Wiley and Sons Inc., New York.
- OECD (2013), *OECD Guidelines on Measuring Subjective Well-Being*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264191655-en>.
- OECD (1999), "New enterprise work practices and their labour market implications", *Employment Outlook 1999*, Chapter 4, OECD Publishing, Paris, http://dx.doi.org/10.1787/empl_outlook-1999-en. Publications.
- Olson, K., J.D. Smith and H.M. Wood (2012), "Does giving people their preferred survey mode actually increase survey participation rates? An experimental examination", *Public Opinion Quarterly*, Vol. 76, No. 4: pp. 611-635, <https://doi.org/10.1093/poq/nfs024>.
- Razafindranovona, T. (2017), "Exploitation de l'enquête expérimentale qualité de vie au travail", *INSEE Working Paper*, No. M2017/01, www.insee.fr/fr/statistiques/2584965.
- Veenhoven, R. (2008), "The International Scale Interval Study: Improving the comparability of responses to survey questions about happiness", in V. Moller and D. Huschka (eds.), *Quality of Life and the Millennium Challenge: Advances in Quality of Life Studies, Theory and Research*, Social Indicators Research Series, Springer, Vol. 35, pp. 45-58.

ANNEX 6.A

Questions modules on the quality of the working environment

A. Extended module

The extended module presented in Table A.1 contains 25 questions selected from existing national and international surveys on the six dimensions and 17 characteristics of the working environment used in these *Guidelines*. If used in its entirety, this module would provide the basis for a dashboard of indicators to assess comprehensively all key characteristics shaping the quality of the working environment; alternatively, a subset of questions could be used for measuring particular aspects of it. The module is designed for surveys with a specific focus on employment, such as working conditions surveys. This module could be implemented around every four to six years to get an in-depth appreciation of how the working environment has been changing. The several items included should help to identify the aspects of the quality of the working environment that require policy action, whereas periodicity would help to monitor changes in those dimensions over time.

The module probes respondents on 25 items, which can be answered on a 5-point scale worded as either *agree/disagree* or *always/never*, depending on whether the item aims to capture the occurrence or frequency of various conditions. The use of this response scale is meant to reduce respondents' cognitive burden and survey time. For each item, Table A.1 below indicates the job characteristics to which the item refers, as well as whether this characteristic pertains to either *job demands* or *job resources*.

The selected items are adapted from questions sourced from: 1) the European Working Conditions Survey; 2) the Effort-Reward Imbalance Questionnaire; 3) the British Skills and Employment Survey; 4) the French *Enquête Conditions de Travail*; 5) the European Social Survey; 6) the European Quality of Life Survey; and 7) the French *Enquête Santé et Itinéraire Professionnel*. Those items that were selected are deemed to be the most statistically reliable in existing surveys; however, for some characteristics, the questions are proposed as "place holders" until better ones are produced, in recognition of the need for more research and experimentation on the properties of alternative formulations.

The order of the items reflects a compromise between the need to cluster themes that relate to similar aspects of workers' experience and the need to avoid frequent switches between positive (i.e. resources) and negative (i.e. demands) items. Data producers should consider field testing and randomising items pertaining to different job characteristics to assess how the question order impacts on responses.

Some of the items have been slightly modified from the original instrument so as to better capture the underlying aspect of the quality of the working environment; modifications are also introduced in the response scales to ensure that they capture as much variation in workers' conditions as possible and to maximise consistency across questions. In case of modifications from the original source, the original question wording and response scale are presented in Table A.1 below each of the items proposed. Users are recommended to follow the suggested wording so as to measure properly all the dimensions of the quality of the working environment; however, when comparability with existing data is the goal, the original question wording and response scale should be used. The module specifies the target sample for each question and provides necessary filters when the item applies to a subset of workers.

Individual questions are expected to take around 15 seconds each to complete; the extended module is hence expected to take 6½ minutes to complete in total.

Questions on the quality of the working environment included in this module (as well as in the condensed module in Table A.2 that follows) should be asked **after** having asked a few contextual questions to assess eligibility and demographic and socio-economic characteristics (e.g. employment status, contract types, main and secondary jobs, total working hours). Where space allows, additional questions should be included on job satisfaction, feelings at work and work commitment. These contextual and additional questions are described in Part D of this Annex.

Table 6.A.1. An extended survey module to measure the quality of the working environment

ALL THE QUESTIONS BELOW REFER TO THE MAIN PAID JOB

To what extent do you agree or disagree with the following statements about your main job?

All statements should be answered based on the following response scales:

| Scale A | Scale B |
|--------------------------------|---------------|
| (1) Completely disagree | (1) Never |
| (2) Disagree | (2) Rarely |
| (3) Neither disagree nor agree | (3) Sometimes |
| (4) Agree | (4) Often |
| (5) Completely agree | (5) Always |
| (6) <i>Not applicable</i> | |
| (7) Don't know | |
| (8) <i>Refused to answer</i> | |

| <i>SURVEY ITEM</i> | <i>JOB CHARACTERISTIC</i> |
|---|---------------------------------------|
| <p>[ASK ALL IN PAID WORK] 1. AT WORK I AM EXPOSED TO NOISE SO LOUD THAT I HAVE TO RAISE MY VOICE TO TALK TO PEOPLE. RESPONSE SCALE B</p> | <p>A1. PHYSICAL RISK FACTORS (JD)</p> |

Source: European Working Conditions Surveys 2015 (Q29B), 2010 (Q23B), 2005 (Q10B), 2000 (Q11_2), 1996 (Q14b), 1991 (Q1).

Original question: "Are you exposed at work to noise so loud that you would have to raise your voice to talk to people?" **Original response scale:** (1) All of the time, (2) Almost all the time, (3) Around 3/4 of the time, (4) Around half of the time, (5) Around 1/4 of the time, (6) Almost never, (7) Never.

Table 6.A.1. An extended survey module to measure the quality of the working environment (cont.)

| | |
|--|--|
| <p>[ASK ALL IN PAID WORK] 2. AT WORK I AM EXPOSED TO HANDLING OR BEING IN SKIN CONTACT WITH CHEMICAL PRODUCTS OR SUBSTANCES. RESPONSE SCALE B</p> <p>Source: <i>European Working Conditions Surveys 2015 (Q29G), 2010 (Q23G), 2005 (Q10G).</i></p> <p>Original question: “Are you exposed at work to handling or being in skin contact with chemical products or substances?” Original response scale: (1) All of the time, (2) Almost all the time, (3) Around 3/4 of the time, (4) Around half of the time, (5) Around 1/4 of the time, (6) Almost never, (7) Never.</p> | <p>A1. PHYSICAL RISK FACTORS (JD)</p> |
| <p>[ASK ALL IN PAID WORK] 3. MY MAIN JOB INVOLVES CARRYING OR MOVING HEAVY LOADS. RESPONSE SCALE B</p> <p>Source: <i>EWCS 2015 (Q30E), 2010 (Q24E), 2005 (q11e), 2000 (q12_3), 1996 (q15d).</i></p> <p>Original question: “Does your main paid job involve carrying or moving heavy loads?” Original response scale: (1) All of the time, (2) Almost all the time, (3) Around 3/4 of the time, (4) Around half of the time, (5) Around 1/4 of the time, (6) Almost never, (7) Never.</p> | <p>A2. PHYSICAL DEMANDS (JD)</p> |
| <p>[ASK ALL IN PAID WORK] 4. MY MAIN JOB INVOLVES WORKING IN TIRING OR PAINFUL POSITIONS. RESPONSE SCALE B</p> <p>Source: <i>European Working Conditions Surveys 2015 (Q30A), 2010 (Q24A), 2005 (q11a), 2000 (q12_1), 1996 (q15a), 1991 (q6).</i></p> <p>Original question: “Does your main job involve tiring or painful positions?” Original response scale: (1) All of the time, (2) Almost all the time, (3) Around 3/4 of the time, (4) Around half of the time, (5) Around 1/4 of the time, (6) Almost never, (7) Never. This item is included here, despite displaying correlations falling below the threshold used in Chapter 5, due to its capacity to capture physical demands applying to both blue-collar and white-collar jobs.</p> | <p>A2. PHYSICAL DEMANDS (JD)</p> |
| <p>[ASK ALL IN PAID WORK] 5. I WORK AT NIGHT FOR AT LEAST 2 HOURS BETWEEN 10.00 PM AND 05.00 AM. RESPONSE SCALE B</p> <p>Source: <i>European Working Conditions Surveys 2015 (Q37A), 2010 (Q32), 2005 (q14a), 2000 (q16_a), 1996 (q18a), 1991 (q12).</i></p> <p>Original question: “Normally, how many times do you work at night, for at least 2 hours between 10.00 p.m. and 5.00 a.m.?” Original response scale: Numeric.</p> | <p>D2. UNSOCIAL WORK SCHEDULE (JD)</p> |
| <p>[ASK ALL IN PAID WORK] 6. I WORK IN MY FREE TIME TO MEET WORK DEMANDS. RESPONSE SCALE B</p> <p>Source: <i>European Working Conditions Surveys 2015 (Q46), 2010 (Q42).</i></p> <p>Original question: “Over the last 12 months, how often have you worked in your free time to meet work demands?” or: “Since you started your main paid job, how often have you worked in your free time to meet work demands?” Original response scale: (1) Daily, (2) Several times a week, (3) Several times a month, (4) Less often, (5) Never.</p> | <p>B1. WORK INTENSITY (JD)</p> |
| <p>[ASK ALL IN PAID WORK] 7. FOR ME, ARRANGING TO TAKE AN HOUR OR TWO OFF DURING WORKING HOURS TO TAKE CARE OF PERSONAL MATTERS IS DIFFICULT. RESPONSE SCALE B</p> <p>Source: <i>European Working Conditions Surveys 2015 (Q47), 2010 (Q43).</i></p> <p>Original question: “Would you say that for you arranging to take an hour or two off during working hours to take care of personal or family matters is ... ?” Original response scale: (1) Very easy, (2) Fairly easy, (3) Fairly difficult, (4) Very difficult.</p> | <p>D3. FLEXIBILITY OF WORKING HOURS (JR)</p> |

Table 6.A.1. **An extended survey module to measure the quality of the working environment (cont.)**

| | |
|---|---|
| <p>[ASK ALL IN PAID WORK] 8. MY JOB INVOLVES WORKING AT VERY HIGH SPEED. RESPONSE SCALE B</p> <p>Source: <i>European Working Conditions Surveys 2015 (Q49A), 2010 (Q45A), 2005 (Q20_A), 2000 (q21_1), 1996 (q15g), 1991 (q8)</i>. Other applications: <i>British Skills and Employment Surveys 2012, 2006, 2001 (bspeed)</i>.</p> <p>Original question: “Does your job involve working at very high speed?” Original response scale: (1) All of the time, (2) Almost all the time, (3) Around 3/4 of the time, (4) Around half of the time, (5) Around 1/4 of the time, (6) Almost never, (7) Never.</p> | <p>B2. WORK INTENSITY (JD)</p> |
| <p>[ASK ALL IN PAID WORK] 9. MY JOB INVOLVES WORKING TO TIGHT DEADLINES. RESPONSE SCALE B</p> <p>Source: <i>European Working Conditions Surveys 2015 (Q49B), 2010 (Q45B), 2005 (q20_b), 2000 (q21_2), 1996 (q15h), 1991 (q9)</i>. Other applications: <i>British Skills and Employment Surveys 2012, 2006, 2001 (bdeadl)</i>.</p> <p>Original question: “Does your job involve working to tight deadlines?” Original response scale: (1) All of the time, (2) Almost all the time, (3) Around 3/4 of the time, (4) Around half of the time, (5) Around 1/4 of the time, (6) Almost never, (7) Never.</p> | <p>B2. WORK INTENSITY (JD)</p> |
| <p>[ASK ALL IN PAID WORK] 10. I LEARN NEW THINGS IN MY JOB. RESPONSE SCALE A</p> <p>Source: <i>French Enquête Conditions de Travail (2013)</i>.</p> <p>Original question: “Your job provides opportunities to learn new things” (Votre travail vous permet-il d’apprendre des choses nouvelles?” Original response scale: (1) Yes (2) No.</p> | <p>E1. TRAINING AND LEARNING OPPORTUNITIES (JR)</p> |
| <p>[ASK ALL IN PAID WORK] 11. I AM ABLE TO CHOOSE OR CHANGE MY METHODS OF WORK. RESPONSE SCALE A</p> <p>Source: <i>European Working Conditions Surveys 2015 (Q54B), 2010 (Q50B), 2005 (q24b), 2000 (q25_2), 1996 (q22B)</i>.</p> <p>Original question: “Are you able to choose or change your method of work?” Original response scale: (1) Yes (2) No.</p> | <p>B1. TASK DISCRETION AND AUTONOMY (JR)</p> |
| <p>[ASK ALL IN PAID WORK] 12. I HAVE ENOUGH OPPORTUNITIES TO USE MY KNOWLEDGE AND SKILLS IN MY CURRENT JOB.* RESPONSE SCALE A</p> <p>Source: <i>British Skills and Employment Surveys 2012, 2006, 2001 (buseskil)</i>.</p> <p>Original question: “How much do you agree or disagree with the following statement: In my current job I have enough opportunity to use the knowledge and skills that I have” Original response scale: (1) Strongly agree (2) Agree (3) Disagree (4) Strongly disagree.</p> <p>* This wording captures Opportunities for Self-Realisation in a more concise way than that used in the international surveys assessed in Chapter 5; this question has been used in many empirical studies, lending support to its reliability.</p> | <p>F1. OPPORTUNITIES FOR SELF-REALISATION (JR)</p> |
| <p>[ASK ALL IN PAID WORK] 13. MY WORK GIVES ME THE FEELING OF A JOB WELL DONE. RESPONSE SCALE A</p> <p>Source: <i>European Working Conditions Surveys 2015 (Q61H), 2010 (Q51H), 2005 (q25i)</i>.</p> <p>Original question: “For each of the following statements, please select the response which best describes your work situation.” “Your job gives you the feeling of work well done.” Original response scale: (1) Always (2) Most of the time (3) Sometimes (4) Rarely (5) Never.</p> | <p>F2. INTRINSIC REWARDS (JR)</p> |
| <p>[ASK ALL IN PAID WORK] 14. I CAN GET SUPPORT AND HELP FROM MY CO-WORKERS WHEN NEEDED. RESPONSE SCALE A</p> | <p>A4. SOCIAL SUPPORT (JR)</p> |

Table 6.A.1. An extended survey module to measure the quality of the working environment (cont.)

Source: European Social Survey 2004 and 2010 (HLPCOW).

Original question: “I can get support and help from my co-workers when needed.” **Original response scale:** (1) Not at all true, (2) A little true, (3) Quite true, (4) Very true.

[ASK ALL IN PAID WORK]

15. I AM INVOLVED IN IMPROVING THE WORK ORGANISATION OR THE WORK PROCESSES OF MY DEPARTMENT OR ORGANISATION.

RESPONSE SCALE A

C1. ORGANISATIONAL PARTICIPATION AND WORKPLACE VOICE (JR)

Source: European Working Conditions Surveys 2015 (Q61D), 2010 (Q51D).

Original question: “For each of the following statements, please select the response which best describes your work situation.” “You are involved in improving the work organisation or work processes of your department or organisation”. **Original response scale:** (1) Always (2) Most of the time (3) Sometimes (4) Rarely (5) Never.

[ASK ALL IN PAID WORK]

16. I CAN INFLUENCE DECISIONS THAT ARE IMPORTANT FOR MY WORK.

RESPONSE SCALE A

C1. ORGANISATIONAL PARTICIPATION AND WORKPLACE VOICE (JR)

Source: European Working Conditions Surveys 2015 (Q61N), 2010 (Q51O).

Original question: “For each of the following statements, please select the response which best describes your work situation.” “You can influence decisions that are important for your work”. **Original response scale:** (1) Always (2) Most of the time (3) Sometimes (4) Rarely (5) Never.

[ASK ALL IN PAID WORK]

17. MY JOB IS EMOTIONALLY DEMANDING.*

RESPONSE SCALE A

B3. EMOTIONAL DEMANDS (JD)

Source: European Quality of Life Survey (2003, 2007).

Original question: “My work is too demanding and stressful”. **Original response scale:** 1-5 (Strongly agree – Strongly disagree).

* This item differs from the original question included in the European Quality of Life Survey by avoiding references to stress, and by the addition of “emotionally” to the notion of a demanding job (as jobs can be demanding for other reasons than the emotions they impose on workers). Gathering more evidence on the statistical reliability of questions for this job characteristic is a priority for future research.

[ASK EMPLOYEES ONLY]

18. IN GENERAL MY IMMEDIATE MANAGER / SUPERVISOR RESPECTS ME AS A PERSON.

RESPONSE SCALE A

A4. SOCIAL SUPPORT (JR)

Source: European Working Conditions Surveys 2015 (Q63A), 2010(Q58B) based on Effort-Reward Balance Questionnaire (ERI 7).

Original question: “To what extent do you agree or disagree with the following statements? Your immediate boss...” “Respects you as a person”. **Original response scale:** (1) Strongly agree, (2) Tend to agree, (3) Neither agree nor disagree, (4) Tend to disagree, (5) Strongly disagree.

[ASK EMPLOYEES ONLY]

19. THE VALUE OF MY WORK IS PROPERLY RECOGNISED.

RESPONSE SCALE A

C3. GOOD MANAGERIAL PRACTICES (JR)

Source: Enquête Sante et Itinéraire Professionnel SIP 2006 and 2012.

Original question wording: “My work is properly recognised (Mon travail est(était) reconnu à sa juste valeur)”. **Original response scale:** (1) Always (toujours) (2) Often (souvent) (3) Sometimes (parfois) (4) Never (jamais) (5) Not applicable (sans objet).

* Good Managerial Practices is covered only by the EWCS among the international surveys included in Chapter 5. The wording recommended here is deemed to better reflect good managerial practices than the EWCS alternatives (e.g. Q58B, Q58C, Q58D and Q58E in 2010).

Table 6.A.1. **An extended survey module to measure the quality of the working environment (cont.)**

[ASK ALL IN PAID WORK]

20. I AM EXPECTING TO LOSE MY JOB IN THE NEXT 6 MONTHS.
RESPONSE SCALE A

E3. PERCEPTIONS OF JOB
INSECURITY (JD)

Source: European Working Conditions Surveys 2015 (Q89G), 2010 (Q77A), 2005 (q37a).

Original question: “To what extent do you agree or disagree with the following statements about your job?” “I might lose my job in the next 6 months”. **Original response scale:** (1) Strongly agree, (2) Tend to agree, (3) Neither agree nor disagree, (4) Tend to disagree, (5) Strongly disagree.

[ASK ALL IN PAID WORK]

21. I AM EXPECTING AN UNDESIRABLE CHANGE IN MY WORK SITUATION.*
RESPONSE SCALE A

E1. PERCEPTIONS OF JOB
INSECURITY (JD)

Source: Effort-Reward Imbalance Questionnaire (ERI 11).

Original question: “I have experienced or expect to experience an undesirable change in my work situation”.
Original response scale: (1) Strongly agree, (2) Agree (3), Disagree, (4) Strongly disagree.

* Although the statistical reliability of this item was not assessed in Chapter 5 due to the absence of broadly similar questions in surveys having broad country coverage, it is recommended for inclusion due to good evidence from analysis of the ERI data that it provides relevant information on workers' perceptions of job insecurity. Gathering more evidence on the statistical reliability of questions for this job characteristic is a priority for future research.

[ASK ALL IN PAID WORK]

22. CONSIDERING ALL MY EFFORTS AND ACHIEVEMENTS, I RECEIVE THE PRAISE AND RESPECT THAT MY WORK DESERVES.
RESPONSE SCALE A

F2. INTRINSIC REWARDS
(JR)

Source: Effort-Reward Imbalance questionnaire (ERI 14).

Original question: “Considering all my efforts and achievements, I receive the prestige and respect I deserve at work”. **Original response scale:** (1) Strongly agree, (2) Agree, (3) Disagree, (4) Strongly disagree.

* Although the statistical reliability of this item was not assessed in Chapter 5 due to the absence of broadly similar questions in surveys having broad country coverage, it is recommended for inclusion due to good evidence from analysis of the ERI data that it provides relevant information on workers' intrinsic rewards. Gathering more evidence on the statistical reliability of questions for this job characteristic is a priority for future research.

[ASK ALL IN PAID WORK]

23. MY JOB OFFERS GOOD PROSPECTS FOR CAREER ADVANCEMENT.
RESPONSE SCALE A

F1. OPPORTUNITIES FOR
SELF-REALISATION (JR)

Source: European Working Conditions Surveys 2015 (Q89B), 2010 (Q77C), 2005 (q37c).

Original question: “To what extent do you agree or disagree with the following statements about your job? My job offers good prospects for career advancement”. **Original response scale:** (1) Strongly agree, (2) Tend to agree, (3) Neither agree nor disagree, (4) Tend to disagree, (5) Strongly disagree.

[ASK ONLY EMPLOYEES WHO RECEIVED TRAINING FROM THE EMPLOYER]

FILTER: OVER THE LAST 12 MONTHS [OR SINCE I HAVE STARTED MY JOB] I HAVE UNDERGONE TRAINING PAID FOR OR PROVIDED BY MY EMPLOYER: (1) YES (2) NO

Source: European Working Conditions Surveys 2015 (Q65A), 2010 (Q61A).

Original question: “Over the past 12 months, have you undergone any of the following types of training to improve your skills?” or: “Since you started your main paid job, have you undergone any of the following types of training to improve your skills?” “Training paid for or provided by your employer”. **Original response scale:** (1) Yes (2) No.

Table 6.A.1. An extended survey module to measure the quality of the working environment (cont.)

24. [IF YES]: I THINK THAT MY PROSPECTS FOR FUTURE EMPLOYMENT ARE BETTER BECAUSE OF THE TRAINING THAT I RECEIVED.
RESPONSE SCALE A

E1. TRAINING AND LEARNING OPPORTUNITIES (JR)

Source: *European Working Conditions Surveys 2015 (Q67C), 2010 (Q61_1C).*

Original question: “Do you agree or disagree with the following statements on the training received over the last 12 months paid for and provided by your employer? I feel my prospects for future employment are better”.

Original response scale: (1) Strongly agree, (2) Tend to agree, (3) Neither agree nor disagree, (4) Tend to disagree, (5) Strongly disagree.

[ASK ALL IN PAID WORK]

25. I FEEL UNFAIRLY TREATED THROUGH DISCRIMINATION AT WORK.
RESPONSE SCALE A

A3. INTIMIDATION AND DISCRIMINATION AT WORK (JD)

Source: *British Skills and Employment Surveys 2012 (idiscrim) and Work in Britain Survey 2000.*

Original question: “How anxious are you about these situations affecting you at your work? Being unfairly treated through discrimination”. **Original response scale:** (1) Very anxious, (2) Fairly anxious, (3) Not very anxious, (4) Not anxious at all.

* This item differs from the original question included in the British Skills and Employment Survey by avoiding references to anxiety; it is recommended for inclusion as it seems able to capture the different forms of workplace intimidation and discrimination. Gathering more evidence on the statistical reliability of questions for this job characteristic is a priority for future research.

These items and modules are provided to NSOs and other data producers as a resource for their own field work. The adaptation to different national circumstances may require changes in question wording, although this would come at the cost of reducing cross-country comparability.

B. Condensed module

This module includes a subset of the items included in the extended module. The items included are those with the highest **relevance** to workers’ well-being and with the strongest evidence on their statistical reliability. These measures should be used in circumstances where there is a need for measuring all six dimensions of the quality of the environment but questionnaire space is limited.

As in the case of the extended module, respondents are provided with 13 statements that can be answered on a 1 to 5 response scale. The order of some items has been changed relative to that used in the extended questionnaire so that respondents are first faced with items implying a negative job characteristic and then with those implying a positive characteristic, so as to reduce the cognitive burden on respondents and the survey time. Where the survey allows it, the order for questions should be randomised to remove the possible bias that may be associated with asking all negative questions first, then all positive questions. The condensed model could be included in surveys based on samples large enough to guarantee the robustness of the estimates at the level of both occupations and industries.

The module includes 13 statements pertaining to 11 job characteristics: two items on Work intensity (B.1); and one each on Physical risk factors (A.1), Physical demands (A.2), Unsocial work schedules (D.1), Flexibility of working hours (D.2), Training and learning opportunities (E.2), Task discretion and autonomy (B.3), Social support at work (A.4), Organisational participation and workplace voice (C.1), Perceptions of job insecurity (E.1) and

Intrinsic rewards (F.2). No items are included in this condensed questionnaire for six job characteristics: Intimidation and discrimination at the workplace (A.3), Emotional demands (B.2), Good managerial practices (C.2), Task clarity and performance feedback (C.3), Opportunity for career advancement (E.3) and Opportunities for self-realisation (F.1). Further evidence and field testing will be needed to identify robust questions for these characteristics.

Table 6.A.2. **Condensed survey module to measure the quality of the working environment**

FROM NOW ONWARDS ALL THE QUESTIONS REFER TO THE MAIN PAID JOB

“To what extent do you agree or disagree with the following statements about your main job?”

All statements should be answered with the following response scales:

| Scale A | Scale B |
|--------------------------------|---------------|
| (1) Completely disagree | (1) Never |
| (2) Disagree | (2) Rarely |
| (3) Neither disagree nor agree | (3) Sometimes |
| (4) Agree | (4) Often |
| (5) Completely agree | (5) Always |
| (6) <i>Not applicable</i> | |
| (7) <i>Don't know</i> | |
| (8) <i>Refused to answer</i> | |

| Survey question | Response scale | Job characteristics |
|--|----------------|---|
| 1. I AM EXPOSED AT WORK TO HANDLING OR BEING IN SKIN CONTACT WITH CHEMICAL PRODUCTS OR SUBSTANCES. | Scale B | A.1. Physical risk factors |
| 2. MY JOB INVOLVES CARRYING OR MOVING HEAVY LOADS | Scale B | A.2. Physical demands |
| 3. I AM ASKED TO WORK IN MY FREE TIME TO MEET WORK DEMANDS. | Scale B | D.1. Unsocial work schedule |
| 4. FOR ME ARRANGING TO TAKE AN HOUR OR TWO OFF DURING WORKING HOURS TO TAKE CARE OF PERSONAL MATTERS IS DIFFICULT. | Scale A | D.2. Flexibility of working hours |
| 5. MY JOB INVOLVES WORKING AT VERY HIGH SPEED. | Scale B | B.1. Work intensity |
| 6. MY JOB INVOLVES WORKING TO TIGHT DEADLINES. | Scale B | B.1. Work intensity |
| 7. I AM EXPECTING TO LOSE MY JOB IN THE NEXT 6 MONTHS. | Scale A | E.1. Perceptions of job insecurity |
| 8. I LEARN NEW THINGS IN MY JOB. | Scale A | E.2. Training and learning opportunities |
| 9. I AM ABLE TO CHOOSE OR CHANGE MY METHODS OF WORK. | Scale A | B.3. Task discretion and autonomy |
| 10. MY WORK GIVES ME THE FEELING OF A JOB WELL DONE. | Scale A | F.2. Intrinsic rewards |
| 11. I GET ADEQUATE SUPPORT FROM MY COLLEAGUES IN DIFFICULT SITUATIONS. | Scale A | A.4. Social support at work |
| 12. I CAN INFLUENCE DECISIONS THAT ARE IMPORTANT FOR MY WORK. | Scale A | C.1. Organisational participation and workplace voice |
| 13. CONSIDERING ALL MY EFFORTS AND ACHIEVEMENTS, I RECEIVE THE PRAISE AND RESPECT THAT MY WORK DESERVES. (R.) | Scale A | F.2. Intrinsic rewards |

Note: Items denoted with an **R** should be coded in reverse.

Individual questions are expected to take around 15 seconds each to complete. The condensed module is expected to take 3½ minutes to complete in total.

C. Core module

This module is intended to provide a minimal set of measures of the quality of the working environment that could be included in general social surveys and implemented on a yearly basis. The core items included are not meant to cover all aspects of the working environment, but rather to anchor this concept in policy discussions alongside traditional measures of labour quantity. These questions are suitable for international comparisons and apply to a wide array of labour-market situations, i.e. both to employees and the self-employed, and to workers in both the formal and the informal economy.

The module includes, among the several items encompassed in the extended and condensed modules, 2 items on job demands, and 2 on job resources: 2 of them describe current conditions and 2 refer to future prospects. The 2 pertaining to job demands refer to work intensity (B.1, i.e. working to tight deadlines or at high speed) and perceptions of job insecurity (E.1, i.e. risk of losing one's job). The 2 pertaining to job resources refer to task discretion and autonomy (B.3, i.e. ability to choose or change methods of work) and training and learning opportunities (E.2, i.e. learning new things on the job). Taken together, data on these 4 items would allow the construction of an individual-level composite measure of the quality of the working environment, based on counting the number of workers facing more jobs demands than the job resources available to them, in line with the type used by the OECD to construct its "job strain" index.

Relative to the questions included in the extended and condensed questionnaire, the items on working at high speed and working to tight deadlines are combined here into a single item, as these two aspects capture types of work intensity experienced by different groups of workers: working at very high speed is strongly associated with manual jobs, whereas working to tight deadlines is strongly associated with professional occupations. As it is important to capture both types of intensity, they are combined into one item in this core module to reduce the number of questions to a minimum.

Box 6.A.3. A core module of items to measure the quality of the working environment

FROM NOW ONWARDS ALL THE QUESTIONS REFER TO THE MAIN PAID JOB

"To what extent do you agree or disagree with the following statements about your main job?"

All statements should be answered with the following response scales:

| Scale A | Scale B |
|--------------------------------|---------------|
| (1) Completely disagree | (1) Never |
| (2) Disagree | (2) Rarely |
| (3) Neither disagree nor agree | (3) Sometimes |
| (4) Agree | (4) Often |
| (5) Completely agree | (5) Always |
| (6) <i>Not applicable</i> | |
| (7) <i>Don't know</i> | |
| (8) <i>Refused to answer</i> | |

Box 6.A.3. A core module of items to measure the quality of the working environment (cont.)

Job demands

1. “My job involves working at very high speed or to tight deadlines” (Scale B)
2. “I am expecting to lose my job in the next 6 months” (Scale A)

Job resources

3. “I am able to choose or change my methods of work” (Scale A)
4. “I learn new things in my job” (Scale A)

Individual questions are expected to take around 15 seconds each to complete. The core module is expected to take 60 seconds to complete in total.

D. Contextual Questions

Beyond probing respondents on various characteristics of their main job, surveys on the quality of the working environment should also include questions that would allow the assessment of eligibility for interview (i.e. whether respondents had any paid job) and describe outcomes for groups with similar demographic and labour-market characteristics (e.g. employment status, occupation and type of contract); questions on these items should be asked in ways that ideally conform to international standards and norms.

In addition to these contextual features, questions on the number of jobs held by each respondent, on their total (i.e. in all jobs) hours of work and commuting, and on the extent to which work interferes with family life are important. Finally, questions of respondents’ job satisfaction and feelings at work, and on their commitment to the firm they work for are important to assess how various job characteristics impact on workers’ well-being and firms’ productivity, and should be asked where space allows.

Eligibility, identification of main job, employment and contract status

- **Eligibility**

Unless the core survey has another employment status question):

- ❖ Can I just check, did you do any paid work in the last seven days?

INTERVIEWER: IF ON HOLIDAY IN LAST 7 DAYS RECORD STATUS IN THE 7 DAYS IMMEDIATELY BEFORE GOING ON HOLIDAY. IF TEMPORARILY SICK IN LAST 7 DAYS, RECORD STATUS IN THE 7 DAYS IMMEDIATELY BEFORE GOING OFF SICK. IF ON GOVERNMENT SCHEME ONLY, CODE NOT EMPLOYED.

- **Socio-demographic characteristics**

Age

Gender

Highest education completed

Marital Status

Parenthood status

Number of children

Household size

Country of birth

- **Main job**

Filter question: Could I check, do you have one job or more than one?

(1) One

(2) More than one

- **Occupation and industry of employment**

What is the title of your main paid job? By main paid job, we mean the one where you spend most hours.

INTERVIEWER: ASK AND WRITE IN FULL DETAILS – PROBE FOR AS MUCH INFORMATION AS POSSIBLE WITH VIEW TO OBTAINING ACCURATE 4-DIGIT ISCO CLASSIFICATION
IF RESPONDENT HAS TWO JOBS WITH IDENTICAL HOURS, ASK THEM TO SELECT THE JOB THEY PERSONALLY FIND MORE IMPORTANT

(Open ended).....

Which of the following best describes your current occupation in your main job?

1. Manager
2. Professional
3. Technician and associate professional
4. Clerical support worker
5. Service and sales worker
6. Skilled agricultural, forestry and fishery worker
7. Craft and related trades worker
8. Plant and machine operator, assembler
9. Elementary occupation
10. Armed forces occupation

What is the main activity of the company or organisation where you work in your main job?

1. Agriculture, hunting, forestry and fishery
2. Industry
3. Services (excluding public administration)
4. Public administration and defence
5. Other services
6. Don't know

- **Self-employment**

Are you working as an employee or are you self-employed?

1. An employee
2. Self-employed

INTERVIEWER ADD IF NECESSARY: By “employee” we mean someone who gets a salary from an employer or a temporary employment agency. “Self-employed” includes people who have their own business or are partners in a business as well as freelancers. A self-employed person may or may not have employees.

INTERVIEWER NOTE: Respondents who work as an employee for their own business should be coded as self-employed. Members of producers’ cooperatives should also be coded as self-employed. Family workers should determine which alternative matches their situation best.

- **Contract type and job tenure**

What kind of employment contract do you have in your main job?

- (1) Contract of unlimited duration
- (2) Contract of limited duration
- (3) A temporary employment agency contract
- (4) An apprenticeship or other training scheme
- (5) No contract

How many years have you been in your company or organisation?

- (1) Number of years:
- (2) Less than 1 year
- (3) Don’t know, refusal, not applicable

- **Working time**

How many hours do you usually work per week?

- ❖ In your main job?
- ❖ In all your paid jobs?

[Numerical value]

- **Commuting time**

In total, how many minutes per day do you usually spend travelling from home to work and back?

[Numerical value]

Based on European Working Condition Surveys

Work-life balance, job satisfaction, feelings at work, productivity and organisational commitment

- **Work-life balance**

In general, do your working hours fit in with your family or social commitments outside work?

- (1) Completely disagree
- (2) Disagree
- (3) Neither disagree nor agree
- (4) Agree
- (5) Completely agree

Based on European Working Condition Surveys

- **Job satisfaction**

The following question asks how satisfied you feel about your main job.

On the whole, how satisfied are you with your job on a scale from 0 to 10 ?” [Zero means you feel “not at all satisfied” and 10 means “completely satisfied”. (For respondents who are employed only)]

Based on OECD Guidelines on Measuring Subjective Well-Being

- **Moods at work**

The following questions ask about how you felt yesterday [or on the most recent day you worked] on your main job on a scale from 0 to 10. Zero means you did not experience the feeling “at all” yesterday while 10 means you experienced the feeling “all of the time” yesterday. I will now read out a list of ways you might have felt yesterday.

- ❖ How about happy? [0-10]

- ❖ How about worried? [0-10]

- ❖ How about depressed? [0-10]

Based on OECD Guidelines on Measuring Subjective Well-Being

- **Productivity and organizational commitment**

How much do you agree or disagree with the following statements:

I am willing to work harder than I have to in order to help this organisation succeed.

I would turn down another job with more pay in order to stay with this organization.

(1) Completely disagree

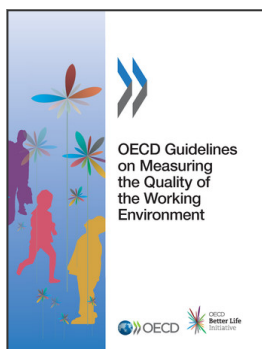
(2) Disagree

(3) Neither disagree nor agree

(4) Agree

(5) Completely agree

Adapted from the British Skills and Employment Survey



From:
OECD Guidelines on Measuring the Quality of the Working Environment

Access the complete publication at:
<https://doi.org/10.1787/9789264278240-en>

Please cite this chapter as:

OECD (2017), "Methodological issues", in *OECD Guidelines on Measuring the Quality of the Working Environment*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/9789264278240-9-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.