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#### Abstract

This chapter examines the role of skill use and development opportunities in shaping meaningful work and job satisfaction for young people. Given the pervasive issue of underemployment of young people across Europe, skills play a vital role in young people's work attitudes and represent a key aspect of job quality and career success. In addition, by taking into account the socio-economic context of recession and national country characteristics represented by employment regime, the chapter extends understanding of some of the boundary conditions influencing young workers' attitudes. Building on theoretical perspectives to work attitudes and wellbeing (Oldham and Hackman 2010; Hackman and Oldham 1976; Karasek and Theorell 1990; Karasek 1979) and using the European Working Conditions Surveys (2005 - 2015), this chapter provides a contextualised examination of job satisfaction as predicted by skill utilisation, skill development and career development opportunities. Findings from multigroup path analyses highlight the role of career development opportunities and work meaningfulness for youth job satisfaction across Europe, even after the recession (although to a lesser extent in comparison to pre-recession) and for those in Liberal (i.e., UK and Ireland) in comparison to Social Democratic employment regimes (i.e., Sweden, Finland and Denmark). Moreover, the confirmed role of meaningfulness as an explanatory mechanism demonstrates the continued applicability of Hackman and Oldham's (1976) job characteristics model across European workers and supports the link between work which is experienced as meaningful and wellbeing more generally.

# Introduction

Provision of decent work for young people (aged between 15 and 24) is a global challenge and policy concern for developing and developed nations (O'Higgins 2017). Young people, particularly due to their lack of human and social capital, are vulnerable to labour market fluctuations, such as economic recessions (Verjans, De Broeck, and Eeckelaert 2007). Although there is considerable national variance, the average youth unemployment rate in Europe has been reported to be twice that of the total unemployment rate (Eurostat 2018b). The majority of academic and policy attention on youth employment has therefore focused on extrinsic features of young people's work as reflected in adequacy of hours and pay (Edwards, Garonna, and Ryan 2016). The decent work agenda, however, goes beyond earning a living wage to include intrinsic aspects of work, such as meaningful work that improves young workers' capabilities and allows sustainable, independent career development (Egdell and McQuaid 2016). Across Europe, we observe an unprecedented increase in the level of tertiary education (Eurostat 2018a): between 1995 and 2012, tertiary graduation rates have increased from 18 to 38 per cent (OECD 2013). Although improving employability and employment opportunities is a priority in the Europe 2020 strategy (European Commission 2010), youth underemployment in jobs that do not match their skills and/or qualifications remains substantial (Bell and Blanchflower 2018; Holmes and Mayhew 2015), with negative implications for work-related attitudes, especially job satisfaction (Sánchez-Sánchez and McGuinness 2015).

High unemployment rates make it particularly difficult for young people to find jobs to match their qualifications (Peiró, Agut, and Grau 2010). Therefore, the transitions from formal education to work typically involve young workers accepting jobs for which they are overqualified (Alba-Ramírez and Blázquez 2003; Kalleberg 2018). The aim of this chapter is to examine young workers' job satisfaction in relation to skill use and skill/career development opportunities offered at work. Job satisfaction is an important outcome of job quality (Van Aerden et al. 2016) and an indicator of work-related wellbeing (Judge and Klinger 2008), and is associated with key work outcomes, such as innovation and creativity, job performance, organisational commitment and turnover intentions (De Moura et al. 2009; Judge et al. 2001; Krumm, Grube, and Hertel 2013). Young workers are argued to be more sensitive to the effects of conditions at work and labour market opportunities, because they have little previous experience to build up resilience (De Witte, Verhofstadt, and Omey 2007). Thus, understanding young workers' job satisfaction in relation to skill use and development at work has implications for improving working conditions and for sustainable labour market participation and career development for the individual (Semeijn et al. 2015). Although there is a plethora of research evidence on the skill underutilisation and job satisfaction of university leavers (e.g., Abel and Deitz 2017; Henseke and Green 2017), young workers without tertiary education are rarely included in these analyses.

Globally, the Great Recession of 2008/09 had a disproportionately hard impact on the quantity and quality of opportunities afforded to young people (Bell and Blanchflower 2011). Particularly in more liberal institutional regimes, where skills policies tend to overemphasise supply-side pressures for provision of skills yet neglect their deployment and development at work (Buchanan et al. 2010), young people are exposed to high risks in securing and maintaining work with implications for job satisfaction at work, and general wellbeing. The chapter contextualises young people's job satisfaction by examining the importance of these predictors pre- and post-recession, and across two contrasting institutional regimes in Europe (i.e., Social Democratic and Liberal). For advancing our understanding of work attitudes, the chapter, therefore, aims to provide a more nuanced understanding of job satisfaction as it is experienced by Europe's young workers, pre-/post-recession and across institutional regimes.

Building on theoretical perspectives to work attitudes and wellbeing (Oldham and Hackman 2010; Hackman and Oldham 1976; Karasek and Theorell 1990; Karasek 1979) and using the European Working Conditions Surveys (2005 - 2015), this chapter provides a contextualised examination of job satisfaction as predicted by skill utilisation and skill/career development. More specifically, the chapter contextualises job satisfaction by examining the following:

- The importance of skill utilisation, skill development and career opportunities for young workers, through experienced meaningfulness of work, on job satisfaction, in comparison to the rest of the working population in Europe;
- The changing importance of skill utilisation, skill development and career opportunities on job satisfaction for Europe's young workers, pre- and post-recession;
- The impact of skill utilisation, skill development and career opportunities on job satisfaction for young workers in Social Democratic and Liberal regimes in post-recession Europe.

# Skills, meaningful work and job satisfaction

Job satisfaction refers to an emotional state resulting from the evaluation or appraisal of one's job experiences in relation to one's work values (Locke 1969). As one of our concerns in this chapter is to understand how youth job satisfaction may be improved through employer practices or job design with implications for skill use and development, we draw from theories which have identified relevant objective job characteristics. These include, but are not limited to, Herzberg's (1966) two-factor theory differentiating between motivators and hygiene factors; Hackman and Oldham's (1976) job characteristics model, postulating five core job characteristics and three psychological states as determinants of job satisfaction; sociotechnical systems theory (Trist 1981) which takes into account the social milieu within which work is done; Karasek's (1979) job demand-control (-support) model; and the job demandsresources model of burnout (Demerouti et al. 2001). Common across these theories is the role of skill use and development on the job for improving job satisfaction. Perceived skill utilisation has consistently been found to be amongst the strongest predictors of job-related affective wellbeing (Morrison et al. 2005), especially of job satisfaction (O'Brien 1983; Okay-Somerville and Scholarios 2018). Moreover, underemployment, especially in the form of overskilling and overqualification, has been shown to be negatively associated with job satisfaction (Kifle, Kler, and Shankar 2018; McKee-Ryan and Harvey 2011; Feldman, Leana, and Bolino 2002) and job-related negative affective wellbeing in general (Karasek 1979; Karasek and Theorell 1990). Positive work attitudes, such as job satisfaction, are strongly related to management practices that are associated with use and development of skills, rather than maintenance of work performance (Kooij et al. 2010; Morrison et al. 2005).

According to Hackman and Oldham's (1976) job characteristics model, when a task requires a person to engage in activities that challenge or stretch his skills and abilities, that task almost invariably is experienced as meaningful by the individual. The person, therefore, reports higher work motivation and job satisfaction. One legacy of the job characteristics model is its emphasis on the role of intrinsic aspects of work for experienced meaningfulness of work (Wrzesniewski and Dutton 2001; Grant and Parker 2009; Grant 2008). Experienced meaningfulness refers to "the degree to which the individual experiences the job as one which is generally meaningful, valuable, and worthwhile" (Hackman and Oldham 1976, 256).

Deriving meaning from events has been described as a "fundamental human motive" (Britt, Adler, and Bartone 2001, 54). Empirical research shows that people who experience meaningfulness of work also report better psychological adjustment, wellbeing, and job satisfaction (Steger, Dik, and Duffy 2012; Arnold et al. 2007; Lysova et al. 2018). One mechanism through which meaningful work improves work outcomes is through its effects on self-efficacy (Rosso, Dekas, and Wrzesniewski 2010), i.e., one's beliefs about his/her capabilities (Bandura 1995). Individuals who experience higher self-efficacy through work, perceive that they have the capacity and capability to exercise control over their environment and therefore experience work as more meaningful (Baumeister and Vohs 2002).

It can be argued that skill use and development through work – which encompasses a range of skill-related concepts, including perceived skill utilisation, development of skills (e.g., through on-the-job or external training) and the provision of career development opportunities - improves experienced meaningfulness at work and hence job satisfaction, because the individual will feel more capable of accomplishing work tasks. In fact, skill use and development have been shown to be central to the enhancement of work-related self-esteem, self-realisation, fulfilment, identity-making at work and work engagement (Felstead et al. 2016; Boxall, Hutchison, and Wassenaar 2015; Fujishiro and Heaney 2017). We, therefore, expect skill use and development at work (a term we use throughout as shorthand to represent job-related skill use, skill development and career opportunities) to be associated with job satisfaction and for this effect to be partially explained by employee experience of meaningfulness at work (see Figure 9.1). This is formulated in our first hypothesis as follows:

*Hypothesis 1 (H1):* Skill use and development at work will be (a) directly and (b) indirectly, via meaningfulness, associated with job satisfaction.

# < FIGURE 9.1 HERE>

# Age and job satisfaction

It is argued that goals and motivation related to work are age dependent (Kanfer, Beier, and Ackerman 2013) and that job satisfaction increases linearly with age (Kalleberg and Loscocco 1983). There is also evidence that the relationship is U-shaped, declining from a moderate level

in the early years of employment and then increasing steadily up to retirement (Clark, Oswald, and Warr 1996; Gazioglu and Tansel 2006).

One explanation of the age dependency of job satisfaction is that it is linked to changes in employee needs, particularly those for personal growth and development, and security (Kooij et al. 2010). It has been argued that as we age our regulatory focus shifts: our need for self-actualisation/personal growth declines but the need for security increases (Freund 2006; Kanfer and Ackerman 2004). Thus, the developmental features of jobs, such as further skill development, become less important for wellbeing as we age (Kooij et al. 2013). Growth through work experience is particularly important for young people in contemporary labour markets (Helyer and Lee 2014), as experience is often a precursor for employability. Many young people find themselves in an 'experience trap' (Bell and Blanchflower 2011) where employers prefer experience over credentials.

Having the opportunity to use and develop skills through work (e.g., through training or further career development opportunities) may therefore be especially important for younger workers' sense of competence and employability in comparison to the rest of the working population. Hackman and Oldham's (1976) job characteristics model also predicts that the relationships between job features, experienced meaningfulness and work attitudes will be moderated by the strength of one's personal growth and development needs. Assuming that younger workers have a higher need for growth, we therefore expect, compared to the rest of the working population, young workers' job satisfaction to benefit more from skill use and development and experienced meaningfulness at work.

*Hypothesis 2 (H2):* The (a) direct and (b) indirect effects of skill use and development at work on job satisfaction will be stronger for young workers compared to the rest of the working population.

# The increasing importance of skills following recession

The Great Recession of 2008-09 has been argued to have hit younger workers disproportionately hard (Bell and Blanchflower 2011). Although there is cross-national variation, across Europe the youth unemployment rate, on average, has risen by 35% between 2008 and 2011 (O'Higgins 2017, 2012). It can therefore be argued that the recession has had a significant impact on the employment opportunities of younger workers (Peters and Besley 2013). It has been shown, for instance, that graduating from university during economic downturn is associated with lower starting salaries and a slower pace of pay progression within the first 10 years of one's career, in comparison to graduating during prosperity (Oreopoulos, von Wachter, and Heisz 2012). Young workers who joined the labour market after the Great Recession may be exposed to higher risks and precarity in the labour market, including unemployment, the prevalence of temporary contracts, and lower starting salaries (Chung, Bekker, and Houwing 2012).

The opportunity for skill use and development at work, especially development which enhances job prospects, may improve wellbeing when workers are experiencing heightened labour

market insecurity (Chung and Van Oorschot 2011), by improving - as noted above - workrelated self-efficacy and self-esteem. In fact, recent research shows that in organisations that implemented some recessionary action, investing in employee skill development and deployment is associated with higher employee skill utilisation, job satisfaction and workrelated affective wellbeing (Okay-Somerville and Scholarios 2018). Finding first-time employment and poor quality jobs that offer little development and progression opportunities are key challenges for young workers in Europe, particularly following the Great Recession (Chung, Bekker, and Houwing 2012). Contemporary post-recessionary European labour markets are characterised by increasing flexibility amongst other factors, such as educationjobs mismatch. The implication for youth employment is a lack of stable employment and career opportunities (O'Reilly et al. 2015). Jobs that offer skill use, skill development, and career advancement opportunities in post-recessionary climates may therefore help overcome the negative attitudinal consequences of labour market insecurity and may be associated with higher work meaningfulness and stronger attitudes toward the job than that in pre-recessionary labour markets. Hence, it can be argued that skill use and development for young workers in post-recessionary labour markets may be more important for job satisfaction than for those in pre-recessionary climates, who may have experienced fewer labour market insecurities.

*Hypothesis 3 (H3):* The (a) direct and (b) indirect effects of skill use and development at work on young workers' job satisfaction will be stronger in a post-recessionary context compared to a pre-recessionary context.

### Institutional regimes and youth job satisfaction

Socio-economic conditions and institutional structures may also influence the skill ecosystems within which skills are developed and deployed (Buchanan et al. 2010; Anderson 2010). Skill ecosystems refer to the range of contextual factors (such as the business setting, institutions and policy framework, modes of engaging labour, structure of jobs, and level and type of skill formation) that shape approaches to skill development and use (Payne 2007). This recognises the wider context of skills policies, including state intervention with respect to skill utilisation at both supply and demand ends of the labour market. Institutional regimes have been categorised in a number of ways, including criteria based on the degree of universal social protection (e.g., Esping-Andersen, 1990), varieties of capitalism (Hall and Soskice 2003), and product, financial and educational markets more specifically (Amable 2003; Hall and Thelen 2009). In this chapter, we use an employment regimes theory approach (Gallie 2009b, 2009a) which takes into account the more specific aspects of institutional regimes. Employment regimes theory focuses on the relative power of employers and workers and provides a comprehensive account of the variation in institutional regimes with implications for crossnational job quality differences within Europe (Gallie 2007; Holman and Rafferty 2017; Holman 2013).

More specifically, we contrast two institutional regimes with regard to the implications of skill use and skill/career development opportunities on the job satisfaction of young workers in post-recessionary Europe: Social Democratic (Denmark, Sweden and Finland) and Liberal (UK and Ireland). The former provides employment rights throughout the working population and participation of organised labour in decision-making is highly institutionalised. There is a strong strategy to promote employment growth and significant protection from unemployment.

The value of employee skills is high, and a tight labour market operates, with low levels of unemployment. By comparison, Liberal institutional regimes are characterised by little state regulation of working conditions and employment levels are assumed to be regulated by the market. Organised labour has little involvement in decision-making. There are low levels of employment protection and the labour market is rather fluid, with little employer interest in investment in training/skills beyond business needs (see Holman (2013) for a more comprehensive review of institutional regimes).

Previous research has shown that institutional regimes explain part of the cross-national variation in job quality. For instance, Holman (2013) shows that high quality jobs (i.e., jobs that are relatively high in job resources, skills and development, wages, security and flexibility) are more commonly observed in Social Democratic regimes in comparison to the rest of the EU. With respect to skill use and career development opportunities, graduates in Liberal regimes report higher skill underutilisation than those in Social Democratic regimes (Holmes and Mayhew 2015). Further evidence shows that a substantial proportion of Swedish young workers reported opportunities for development on the job in comparison to older workers (European Foundation for the Improvement of Living Working Conditions 2013), whereas in the UK, organisations that rely on young workers were found to be less likely to offer training and development opportunities (UKCES 2012). Recent evidence from post-recessionary Denmark and Sweden (two of the three EU-27 countries categorised as Social Democratic) shows declining social investment in skill matching and upskilling, including provision of jobrelated training in the workplace or classroom, and increasing emphasis on incentive reinforcement and employee assistance towards labour market entry and progression (Bengtsson, de la Porte, and Jacobsson 2017). Evidence from the UK shows that the impact of recession on training expenditure and training participation was negligible (Felstead, Green, and Jewson 2012), with most employers choosing 'training smarter', e.g., prioritizing courses likely to have most impact on business performance (Jewson, Felstead, and Green 2015).

With regards to understanding job satisfaction resulting from jobs which provide high skill use and career development opportunities in post-recessionary Social Democratic and Liberal regimes, empirical evidence from the working population and theory offer alternative predictions. Youth job satisfaction trends across the EU27 countries is mixed. A positive trend in the job satisfaction of young people (defined 15-29 years) is observed in some countries, e.g., Austria, Germany and Finland, and a reverse trend in others, e.g., Sweden, Denmark and Ireland (European Foundation for the Improvement of Living Working Conditions 2013); but how does this relate to job quality? Notwithstanding the post-recessionary shifts in social investment in skills noted above in Social Democratic regime countries (Bengtsson, et al., 2017), empirical evidence regarding the quality of jobs in each regime (e.g., Holman 2013) still suggests higher skill use and development in Social Democratic compared to Liberal regimes. Assuming young workers have access to similar skill use and development opportunities as the overall working population, those in Social Democratic regimes may be more likely to show a strong association between high skill use/career development opportunities and job satisfaction through their effect on experienced meaningfulness. The rationale for this lies in the expected association between higher job quality (more enriched job characteristics in terms of the skill variety and challenge provided by the job) and work-related attitudes. This is consistent with Hackman and Oldham's (1976) depiction of experienced meaningfulness in work as almost invariably associated with greater skill variety and challenge.

An alternative possibility considers the contrasting labour market contexts for young people and how higher skill investment is interpreted. Given their generally higher levels of skills underutilisation at work (Holmes and Mayhew 2015), youth in Liberal regimes may demonstrate stronger positive reaction to skills investment as a result of perception of relative deprivation (Hu et al. 2015) and associated social comparisons to others (Bashshur, Hernández, and Peiró 2011). For young people in Liberal regimes, skill use and career development opportunities provided by an employer may be scarce, and so represent not only better internal employment opportunities but also better external employability given that these young people are likely to have fewer such external worries regarding their employability. Given also the relatively compressed wage structure in Social Democratic regimes compared to the UK (Berglund and Esser 2014), investment in skill development may be less salient for these young workers, resulting in a weaker link between job quality and job satisfaction.

We formulate our final hypothesis to reflect the former position, with Social Democratic regimes expected to demonstrate stronger positive effects on job satisfaction than those in Liberal regimes. However, we recognise the possibility that individuals may interpret employer investment in skill differently according to the wider labour market and employment context. As such, we tentatively suggest the direction of this hypothesis but regard this as part of a theory building process regarding contrasts across employment regimes in how job quality relates to job satisfaction.

*Hypothesis 4 (H4):* Within the post-recessionary context, the direct and indirect effects of skill use and development at work on young workers' job satisfaction will be stronger for those in Social Democratic, compared to Liberal, employment regimes.

# Methodology

# Data and sample

The analyses presented in this chapter are informed by the European Working Conditions Surveys (EWCS). The EWCS provides data on working conditions in Europe. Topics covered in the survey include many aspects of working lives relevant for job quality and job satisfaction, e.g., work intensification, working time, skills, discretion and other cognitive aspects of work, employment prospects, social environment, job and organisation context and working life perspectives (including job satisfaction and work fulfilment). The target population of the EWCS is residents aged 15 and above (16 in the UK, Bulgaria, Norway and Spain) and in employment at the time of the survey. Multi-stage, stratified, random sampling is used in each country. The data is collected in the form of face-to-face interviews conducted at the participant's home. The interviews took 45 minutes on average (see Technical Report for a detailed review of the sampling strategies and fieldwork (IPSOS 2016)).

For testing each hypothesis, the dataset was reduced to match the target population as follows: H1 and H2 included data from the EU27 sample for cohorts from 2005, 2010 and 2015; H3 only included young workers (16-24) in the EU27; H4 only included post-recessionary data (2010 and 2015) from young workers in Social Democratic (Denmark, Sweden and Finland) and Liberal employment regimes (UK and Ireland). Only those with complete data on the key variables of interest were retained for analysis. Table 9.1 provides a description of the sample at each step of the analysis.

### Measures

Measures included four broad categories: skill use and development, meaningfulness at work, job satisfaction and control variables. Following Holman (2013) *skill use and development* involved four separate items: (a) *perceived skill use* was measured using responses to the question "which of the following statements would best describe your skills in your own work?" Responses were recoded into a dummy variable with responses 'I need further training to cope well with my duties' and 'My present skills correspond well with my duties' representing "Utilisation" (1), while the response 'I have the skills to cope with more demanding duties' represent "Underutilisation" (0). (b) *career development opportunities* was based on responses to the question 'My job offers good prospects for career advancement' measured on a 5-point scale, 1 'strongly disagree', 5 'strongly agree'; (c) *employer-paid training* (0 No, 1 Yes); and (d) *on-the job training* (0 No, 1 Yes).

*Meaningfulness at work* was measured with three items ('Your job gives you the feeling of work well done'; 'You are able to apply your own ideas in your work' and 'You have the feeling of doing useful work'). All items were on 5-point scale (1=Never', 5=Always'). A confirmatory factor analysis suggests a good factor structure for this construct (CFI=1.00; TLI=1.00) with the standardised factor loadings for items (.49 - .78) indicating good reliability. A composite *meaningfulness at work* score based on the average of the three items was subsequently computed and used for the analysis.

*Job satisfaction* was a single-item measure ('On the whole, are you very satisfied, satisfied, not very satisfied or not at all satisfied with working conditions in your main paid job?'; 4-point scale, 1=not at all satisfied, 4=very satisfied).

*Control variables* included: gender (1= Female, 0=Male), education (measured as a continuous variable on a 7-point scale from 0=pre-primary to 6=second stage tertiary education) and perceived job security (single item: 'I might lose my job in the next 6 months'; 1=strongly agree, 5=strongly disagree).

<INSERT TABLE 9.1 HERE>

Analyses

Hypotheses were tested using path analyses. Path analysis is a structural equation modelling technique that allows researchers to test prior hypotheses about causal relation among variables. An advantage of this approach is the ability to simultaneously consider multiple independent and dependent variables in contrast to conventional regression approach, which is restricted to a single dependent variable. Testing of H2, H3 and H4 involved multi-group path analyses, comparing three age groups (16-24, 25-34, 35-65), pre-/post-recession data (2005 vs 2010 and 2015) and employment regimes (Social Democratic vs Liberal) respectively. H3 and H4 were tested only using youth data (aged between 16-24). Moreover, H4 was further restricted to post-recession datasets (2010 and 2015). Model fit indices and direct and indirect path coefficients are reported. All analyses were undertaken in Mplus 8 and taking into account cross-national weights for EU27 group of countries. Models were evaluated using established goodness of fit indices with comparative fit index (CFI) and Tucker-Lewis index (TLI) values above .95 as well as the root mean square error of approximation (RMSEA) value below .05 indicating good model fit (Hu and Bentler 1999; Marsh, Hau, and Wen 2004).

### Limitations

The European Working Conditions Survey allowed us to examine the job satisfaction and working experience of a representative European sample of young workers against the general working population at different time periods (2005, 2010 and 2015), and provided wide coverage of a range of employment variables. Despite the advantages of such secondary data, there are inevitable limitations for the purposes of our hypothesis tests. First, the dataset provides cross-sectional data from multiple cohorts rather than longitudinal data following individuals. This means that the contrasts between pre- and post-recessionary contexts rely on different cohorts. While we used control variables to account for some cohort differences (e.g., gender, education, perceived job security), the number of variables included and our reduction of the sample for some analyses to young people/post-recession precluded the inclusion of some significant variables (e.g., workplace variables, such as industry or size, or other dimensions of intrinsic job quality, such as task discretion and variety).

A second limitation is the definition of and comparisons between age cohorts across the different time periods. In the absence of longitudinal data for individuals, we make assumptions about the comparability of young people across time, even though these cohorts may vary in preferences and work orientations (Twenge et al. 2010). However, our interest in the relationship between skills and job satisfaction does not assume any generational cohort effects, which are controversial in the literature (Costanza et al. 2017), and the inclusion of control variables accounts for variations in perceived labour market differences (a primary concern with regard to the effects of skills) as well as for potential effects of gender and education.

Finally, the secondary dataset restricts measurement for some variables. The EWCS uses a single item measure of job satisfaction, our dependent variable. Although single item measures are generally discouraged for psychological constructs, a meta-analysis by Wanous et al. (1997) indicated convergent validity between single-item and scale measures of overall

job satisfaction. Another concern is the measurement of skill use provided by the EWCS which is based on categorical or dichotomous items, such as whether employer-based or onthe-job training was provided or not. We recognise that this provides a narrow operationalisation of perceived skill utilisation. Other work in this area has attempted to refine the operationalisation of skill utilisation to include, for example, whether training provided is actually perceived to enhance skills for one's job (Felstead et al. 2016). The secondary dataset meant we could not replicate such complex measures of skill utilisation; however, in an effort to create a comprehensive measure, we relied on four different aspects of skills use, as suggested by Holman (2013), provided by the EWCS.

#### Findings

Table 9.2 summarises model fit for each analysis and provides path coefficients for the models tested. It can be observed from fit indices (i.e., RMSEA, CFI and TLI) that all models were good-fit with the data. Tests of the baseline model (H1 column) showed that job satisfaction was directly and positively associated with all predictors, except for employer-paid training. Moreover, job satisfaction was positively and indirectly associated with career opportunities ( $\beta$ =.05, SE=.002, p<.001) and employer-paid training ( $\beta$ =.01, SE=.002, p<.001), and negatively with on-the-job training via meaningfulness at work ( $\beta$ =-.01, SE=.002, p<.001). Skill use, however, did not predict meaningfulness and was not indirectly associated with job satisfaction. These findings partially support Hypothesis 1.

Multi-group analyses examining the strength of the relationships predicting job satisfaction by age (Table 9.2, H2 columns) show that across all age categories, career opportunities and on-the-job training directly and indirectly predict job satisfaction. Moreover, the strength of indirect effects of career opportunities in predicting young workers' job satisfaction ( $\beta$ =.085, SE=.010, p<.001) was greater than that for the older workforce (35-65;  $\beta$ =.05, SE=.002, p<.001). The strength of on-the-job training for predicting job satisfaction via work meaningfulness was stronger for the latter ( $\beta$ =-.008, SE=.002, p<.001), in comparison to the younger workforce (both 16-24 and 25-35). Predictors of young workers' job satisfaction were similar to those aged between 25 and 34. By comparison, the pattern of relationships observed among the 35-65 age category were similar to those reported above under the baseline model. The only exception to this pattern was the negative and indirect association between skill utilisation and job satisfaction via meaningfulness ( $\beta$ =-.01, SE=.002, p<.001) for this age category. These findings only partially support Hypothesis 2.

Table 9.2 (column H3) shows multi-group analyses examining the strength of relationships predicting young workers' job satisfaction across pre-(2005) and post-recession (2010 and 2015) data. Young workers' job satisfaction was directly and indirectly, via meaningfulness, associated with career opportunities. Moreover, the strength of the indirect relationship is lower after the recession (2010:  $\beta$ =.06, SE=.01, p<.001 and 2015:  $\beta$ =.07, SE=.02, p<.001) in comparison to the pre-recession coefficient (2005;  $\beta$ =.11, SE=.02, p<.001). A similar pattern is observed for the direct relationships between career opportunities and meaningfulness, and meaningfulness and job satisfaction where the strength of the relationship is lower post-recession. In 2015, we also observe on-the-job training to have a negative indirect effect on

job satisfaction ( $\beta$ =-.03, SE=.01, p<.01) and a negative direct effect on meaningfulness ( $\beta$ =-.12, SE=.04, p<.001). These findings do not support Hypothesis 3.

Young people's post-recession job satisfaction is presented for Social Democratic and Liberal employment regimes in Table 9.2 (column H4). As above, significant direct and indirect relationships were observed between career opportunities (via meaningfulness for the latter) and job satisfaction. The strength of these relationships was stronger for young workers in Liberal, in comparison to Social Democratic, regimes. Moreover, among young workers in Social Democratic regimes, job satisfaction was negatively associated with employer-paid training ( $\beta$ =-.25, SE=.06, p<.001) and positively with skill use ( $\beta$ =.15, SE=.06, p<.05).

### <INSERT TABLE 9.2 HERE>

### Discussion

This chapter examines the role of skill use and development in shaping meaningful work and job satisfaction for young people. Given the pervasive issue of underemployment of young people across Europe, skills play a vital role in young people's work attitudes and represent a key aspect of job quality and career success. In addition, by taking into account the socio-economic context of recession and national country characteristics represented by employment regime, the chapter extends understanding of some of the boundary conditions influencing young workers' work attitudes.

We set out three aims designed to assess the changing importance of skills as a source of work meaningfulness and job satisfaction for young people. The test of a baseline model with the working population across the EU27 countries (H1) confirmed the importance of career opportunities as expected, however, the effects of other aspects of how organisations deliver skill use and development showed mixed results. Workers' perceived skill utilisation was not a significant predictor of job satisfaction. On-the-job training was positively associated with job satisfaction but negatively with meaningfulness, implying that the overall indirect effect on job satisfaction was negative, contrary to expectation. In the case of employer-paid training, there was no direct relationship to job satisfaction but an overall positive indirect effect via meaningfulness.

These baseline findings indicate the importance of career development opportunities and some types of training for job satisfaction across the working population, thus supporting previous evidence promoting job prospects which impact job quality and in turn work attitudes (Felstead et al. 2016; Boxall, Hutchison, and Wassenaar 2015; Fujishiro and Heaney 2017). Moreover, the confirmed role of meaningfulness as an explanatory mechanism demonstrates the continued applicability of Hackman and Oldham's (1976) job characteristics model across European

workers and supports the link between work which is experienced as meaningful and wellbeing more generally (Steger, Dik, and Duffy 2012; Arnold et al. 2007; Lysova et al. 2018).

Building on this baseline model, our first aim was to examine whether this model holds for younger workers and is in fact stronger than for older workers (H2). Patterns predicting job satisfaction for 16-24 year olds were similar to the 24-34 age group but different from older workers (aged 35-65). We observed more reported career development opportunities in their jobs by the younger workers (Table 9.1), and these have a stronger indirect impact on young workers' job satisfaction. This finding indicates a greater relevance of work meaningfulness for youth job satisfaction, a point which was confirmed also by the stronger significant direct relationship between meaningfulness and satisfaction found for the 16-24 age group. Considering the prevalence of precarity among young entrants to European labour markets (regardless of educational attainment) (Lodovici and Semenza 2012), jobs that provide career opportunities may satisfy both growth and security needs at work. There is support across European data, therefore, that younger workers are more likely to gain meaning from work which provides employability and that jobs which provide skill development are more important for youth job satisfaction than for older workers (Kooij et al. 2010).

We also found that employer-paid training was indirectly related to job satisfaction through meaningfulness only for the 35-65 age category, indicating that this means of skill development was not important for younger workers. Younger workers also reported lower provision of such training (Table 9.1). Such a finding may indicate that older workers attach greater importance to 'maintenance' HRM practices (as opposed to 'developmental HRM'). The former are more likely to help them avoid skill obsolescence and hence are more directly related to performance outcomes (Kooij, et al., 2013). Employer-paid training may fall into this category. On-the-job training was most common among young workers (Table 9.1). Contrary to expectation, the direct and indirect effect of on-the-job training with job satisfaction was negative across all age groups; this effect was strongest for the older workers. Moreover, negative indirect effects of skill use, via work meaningfulness, on job satisfaction were also observed amongst older workers. Nevertheless, no differences were observed between age categories with respect to skill use. Together, these unexpected findings may point to the conflicting effects of HRM (Ogbonnaya and Messersmith 2018), where not all HRM practices may be perceived and experienced positively by employees (Schmidt, Pohler, and Willness 2018).

The second aim of this chapter was to examine the changing importance of skill utilisation and development on job satisfaction for Europe's young workers, pre- and post-recession. We expected the importance of skill utilisation and development to increase for young workers following the recession. We observe provision of all measures of skill use and development included in this analysis to show an upward trend from pre-recession (2005) to post-recession for young worker cohorts (2010 and 2015). Findings show organisational career opportunities to play a pivotal role. Most notably, post-recession the importance of career opportunities on meaningfulness and indirectly on job satisfaction lessens. Alongside this, the importance of job security on job satisfaction has been declining across the three time points. Hence, although career opportunities are consistently significantly related to job satisfaction, their importance may fluctuate with macro-economic context. This may indicate that in today's post-recessionary context, young people may value career opportunities less as relevant for job satisfaction, as the labour markets they enter require that they show greater flexibility in seizing

employment opportunities (O'Higgins 2012). Moreover, the 2015 dataset also shows that meaningfulness is not associated with job security (although the relationship was significant and showed comparable levels in the 2005 and 2010 datasets) and that those with higher levels of education experience more meaningfulness at work. We may interpret these findings as young workers' internalisation of the 'new economy discourse' that they should be more reliant on their proactive behaviours (e.g., networking) and less so on organisational management of career. Both pre-recession (King 2003) and post-recession (Guillot-Soulez and Soulez 2014) evidence shows that young workers do have a preference for traditional organisational careers and more specifically for job security at work. Moreover, although the recession has been shown to lower young workers' optimism, little change has been reported in expectations for job content, e.g., training, career development and financial rewards (De Hauw and De Vos 2010). Nevertheless, proactive career behaviours, especially during early career positively impact career success (De Vos, De Clippeleer, and Dewilde 2009). For instance, Agut, Peiro and Grau (2009) show for Spanish young workers, personal initiative buffers the negative work-related effects of underemployment.

Our final aim in this chapter was to examine the impact of skill utilisation and development on job satisfaction for young workers in Social Democratic and Liberal regimes in post-recession Europe. Based on employment regimes theory, we expected young workers in Liberal regimes to benefit less from skill use and development at work, as they suffer greater insecurity and precarity in the labour market. Confirming previous research on job quality (Holman 2013), descriptive findings (Table 9.1) show that young workers in Liberal regimes are afforded poorer skill use and development, with the exception of the measure of career development opportunities. Our findings show that the key distinction relevant for predicting young workers' job satisfaction was, as above, on career opportunities. Contrary to how we formulated the hypothesis here, we find that career development opportunities have stronger direct and indirect effect on job satisfaction for youth in Liberal, in comparison to Social Democratic, regimes. Perhaps due to the relatively compressed wage structure in the latter compared to the UK at least (Berglund and Esser 2014) career advancement is not as salient for young workers' job satisfaction. Supporting this speculation, job security was significantly associated with work meaningfulness for youth in the Social Democratic, but not in Liberal regimes. Nevertheless, job security was significantly associated with job satisfaction for young workers across both regimes. Although the European Commission recommends 'flexicurity' - simultaneously increasing labour market flexibility and security, by enhancing employability – for improving productivity, evidence on training investments in post-recessionary Denmark and Sweden shows declining investment in employer-provided training (Bengtsson, de la Porte, and Jacobsson 2017). Our findings show that, in Social Democratic regimes, skill use and employer-provided training have positive and negative direct effects on job satisfaction, respectively. For explaining the negative relationship, we can speculate based on Bengtsson et al.'s (2017) findings, that perhaps the content of employer-provided training does not necessarily lead to growth and development through work for young people, as postrecessionary organisations feel less pressure to invest in employee skills and knowledge, similar to UK employers' preference for 'training smarter' (i.e., for maximum impact) (Jewson, Felstead, and Green 2015). The lack of significant relationship between skill use and job satisfaction among youth in Liberal regimes may be explained by the prevalence of overskilling. For instance, as high as 58.8% of university leavers have been reported to be working in non-graduate jobs in the UK (Holmes and Mayhew 2015) and the evidence of job upskilling for better use of these high skills remains limited (Okay-Somerville and Scholarios 2013).

# Conclusion

The findings highlight the importance of jobs which provide career development opportunities and work meaningfulness for youth job satisfaction across Europe, especially post-recession and for those in Liberal employment regimes. The analysis re-affirms concerns for young people's employability, and whether employers/governments are providing adequate skill utilisation and development. Such concerns are also reflected in the Europe 2020 strategy. Moreover, the confirmed role of meaningfulness as an explanatory mechanism demonstrates the continued applicability of Hackman and Oldham's (1976) job characteristics model across European workers, and supports the link between work which is experienced as meaningful and wellbeing more generally (Arnold, Turner, Barling, Kelloway, and McKee 2007; Lysova, Allan, Dik, Duffy and Steger, 2018; Steger, Dik, and Duffy 2012).

The approach taken in this chapter acknowledges the importance of macroeconomic and institutional context for a nuanced understanding of job satisfaction for young workers, especially for those without tertiary education, and confirms the importance of skills and career development for young people in the period following the Great Recession, despite increased precariousness in work opportunities.

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Figure 9.1 Conceptual framework for the effects of skill use/development on job satisfaction



for young people across Europe

Note. Solid arrows: baseline model (H1)

# Table 9.1 description of the sample and measures at each step of the analysis

	H1:	H2: EU27		H3: EU27 & Youth		Youth	H4: EU27 & Youth & Post-recession		
	EU27	16-24	25-34	35-65	2005	2010	2015	Social Democratic	Liberal
N	77125	5836	17104	54185	2017	2049	1770	392	373
Job satisfaction	3.07	3.09	3.07	3.06	2.99	3.06	3.24	3.14	3.33
Meaningfulness	4.00	3.70	3.97	4.06	3.63	3.72	3.77	3.85	3.59
Perceived skill use <sup>1</sup>	.69	.68	.68	.69	.64	.69	.72	.71	.60
Career development opportunities	2.84	3.08	3.08	2.72	2.94	2.99	3.34	2.98	3.57
Employer paid training <sup>1</sup>	.35	.30	.37	.35	.21	.32	.38	.33	.46
On-the-job training <sup>1</sup>	.33	.41	.36	.30	.33	.40	.51	.53	.60
Female	.46	.45	.47	.46	.44	.45	.48	.51	.47
Education	3.44	3.09	3.68	3.40	3.035	3.086	3.16	2.95	3.13
Job security	3.92	3.75	3.81	3.98	3.78	3.58	3.88	3.69	4.04

Note. <sup>1</sup>0=No, 1=Yes.

Table 7.2 I all allalyses coefficients predicting job satisfaction
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	H1	H2 (EU27)			
	EU27	16-24	25-34	35-65	
Direct effects					
Skill Use <sup>1</sup> >Meaningfulness	010 (.006)	.044 (.023)	.004 (.012)	028 (.007)***	
Career opp>Meaningfulness	.212 (.006)***	.325 (.021)***	.261 (.013)***	.200 (.007)***	
Training (paid for) <sup>1</sup> >Meaningfulness	.034 (.006)***	.016 (.022)	.021 (.013)	.028 (.008)***	
Training (on-the-job) <sup>1</sup> >Meaningfulness	045 (.006)***	046 (.022)***	030 (.013)*	034 (.007)***	
Meaningfulness>Job satisfaction	.243 (.006)***	.261 (.025)***	.229 (.013)***	.246 (.007)***	
Skill Use <sup>1</sup> >Job satisfaction	.016 (.006)***	.030 (.022)	.009 (.011)	.017 (.007)**	
Career opp>Job satisfaction	.263 (.006)***	.249 (.023)***	.286 (.012)***	.250 (.007)***	
Training (paid for) <sup>1</sup> > Job satisfaction	.007 (.006)	.005 (.021)	.022 (.012)	.004 (.007)	
Training (on-the-job) <sup>1</sup> > Job satisfaction	.020 (.006)***	.035 (.022)	.024 (.012)*	.013 (.007)	
Indirect effects (via meaningfulness)					
Skill Use <sup>1</sup> >Job satisfaction	002 (.002)	.012 (.006)	.001 (.003)	007 (.002)***	
Career opp>Job satisfaction	.052 (.002)***	.085 (.010)***	.060 (.005)***	.049 (.002)***	
Training (paid for) <sup>1</sup> > Job satisfaction	.008 (.002)***	.004 (006)	.005 (.003)	.007 (.002)***	
Training (on-the-job) <sup>1</sup> > Job satisfaction	011 (.002)***	012 (.006)*	007 (.003)*	008 (.002)***	
Control variables					
Female>meaningfulness	.008 (.006)	.028 (.021)	.039 (.012)***	006 (.007)	
Education>meaningfulness	.070 (.006)***	.091 (.020)***	.056 (.013)***	.063 (.008)***	
Job Security>meaningfulness	.164 (.006)***	.124 (.022)***	.147 (.013)***	.161 (.007)***	
Female>Job satisfaction	.039 (.005)***	.040 (.019)*	.040 (.011)***	.040 (.006)***	
Education>Job satisfaction	009 (.006)	016 (.021)	015 (.012)	.001 (.007)	
Job Security>Job satisfaction	.166 (.006)***	.182 (.021)***	.163 (.013)	.163 (.007)***	
Model fit					
χ2/df	8609.87/15	887.11/45	887.11/45	887.11/45	
RMSEA	.000	.000	.000	.000	
CFI	1.000	1.000	1.000	1.000	
TLI	1.000	1.000	1.000	1.000	

Table 9.2 continued...

	H3	(EU27 & age 16 -	- 24)	H4 (EU27 & age 16 – 24 & post-recession)		
	2005	2010	2015	Social democratic	Liberal	
Direct effects						
Skill Use <sup>1</sup> >Meaningfulness	.054 (.037)	.010 (.038)	.046 (.042)	.005 (.071)	002 (.072)	
Career opp>Meaningfulness	.373 (.033)***	.256 (.034)***	.332 (.040)***	.273 (.063)***	.402 (.055)***	
Training (paid for) <sup>1</sup> >Meaningfulness	010 (.037)	.036 (.036)	.016 (.041)	.065 (.059)	.084 (.072)	
Training (on-the-job)>Meaningfulness	036 (.038)	.008 (.035)	121 (.039)***	033 (.060)	009 (.073)	
Meaningfulness>Job satisfaction	.297 (.043)***	.221 (.037)***	.225 (.043)***	.263 (.081)***	.303 (.083)***	
Skill Use <sup>1</sup> >Job satisfaction	.057 (.035)	.052 (.034)	070 (.039)	.145 (.063)*	.028 (.070)	
Career opp>Job satisfaction	.248 (.041)***	.256 (.033)***	.226 (.043)***	.118 (.065)	.117 (.077)	
Training (paid for) <sup>1</sup> > Job satisfaction	.033 (.031)	.033 (.035)	050 (.040)	248 (.060)***	035 (.078)	
Training (on-the-job) <sup>1</sup> > Job satisfaction	.042 (.036)	017 (.033)	.041 (.038)	.112 (.058)	012 (.070)	
Indirect effects (via meaningfulness)						
Skill Use <sup>1</sup> >Job satisfaction	.016 (.012)	.002 (.008)	.010 (.009)	.001 (.019)	001 (.022)	
Career opp>Job satisfaction	.111 (.017)***	.056 (.012)***	.074 (.017)***	.072 (.027)**	.122 (.040)**	
Training (paid for) <sup>1</sup> > Job satisfaction	003 (.011)	.008 (.008)	.004 (.009)	.017 (.016)	.025 (.022)	
Training (on-the-job) <sup>1</sup> > Job satisfaction	011 (.012)	.002 (.008)	027 (.010)**	009 (.015)	003 (.022)	
Control variables						
Female>meaningfulness	.027 (.034)	.013 (.035)	.043 (.036)	.100 (.058)	054 (.067)	
Education>meaningfulness	.065 (.032)*	.043 (.034)	.160 (.038)***	.007 (.040)	.150 (.055)**	
Job Security>meaningfulness	.158 (.036)***	.158 (.036)***	.048 (.038)	.236 (.058)***	.051 (.059)	
Female>Job satisfaction	.061 (.031)*	.022 (.032)	.011 (.037)	048 (.055)	.016 (.069)	
Education>Job satisfaction	.009 (.030)	046 (.037)	049 (.043)	.002 (.044)	083 (.075)	
Job Security>Job satisfaction	.212 (.036)***	.176 (.033)***	.140 (.038)***	.157 (.060)***	.174 (.067)**	
Model fit						
χ2/df	912.01/45	912.01/45	912.01/45	189.60/30	189.60/30	
RMSEA	.000	.000	.000	.000	.000	

CFI	1.000	1.000	1.000	1.000	1.000
TLI	1.000	1.000	1.000	1.000	1.000

Note. <sup>1</sup>0=No, 1=Yes; coefficients reflect non-standardised Beta coefficients with standard errors in parentheses; \* p<.05, \*\*p<.01, \*\*\*p<.001.