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Abstract

Young people who have not completed an upper secondary qualification, i.e. early school leavers (ESL), are at a high risk of marginalization in today's knowledge economies. The aim of this paper is to study this group in their 20s and early 30s to analyse their participation in learning and whether participants benefit from their learning in terms of improved employment outcomes. We use longitudinal data from the British Household Panel Survey (BHPS) for our study.

We find that, in general, adult learning perpetuates inequalities within the group of early school leavers. Even within this disadvantaged group, participation is more likely for those who are relatively advantaged in terms of social class origin, prior education and employment. Non-formal learning is found to improve earnings but not employment chances. New qualifications that do not lead to exit from ESL status have an uncertain impact. Exit from ESL status tends to increase both employment chances and earnings.

We conclude that returning to education is advantageous for early school leavers, particularly when they are able to achieve a full upper secondary education or above. However, second-chance education does not reach the most disadvantaged early school leavers as effectively as it does the less disadvantaged.

Keywords: early school leaver; adult education; lifelong learning; employment; earnings

Introduction

The aim of this paper is to study a group that is at a high risk of marginalization in today's knowledge economies, namely young people who have not completed an upper secondary qualification, also termed as early school leavers (ESL). According to the most recent data, this group represents over 30 per cent of the 40 million NEETs in OECD countries – those who are not in education, employment or training aged 15–29 (OECD 2016a). Data from the same source indicate that one in six 25–34 year olds in OECD countries left school before obtaining an upper secondary degree.

Failing in the educational system has been largely acknowledged as one of the most important events leading to multiple disadvantages in adulthood. Obstacles faced during early stages of the transition to adulthood may lead to negative consequences on later work, family and well-being (Pailhé et al. 2014). Although the proportion of individuals attaining a low educational level has decreased over time, educational expansion and occupational upgrading has tended to leave this group in a very weak position for competing in the labour market (Bäckman et al., 2011; Brauns et al. 2003; Gangl 2002; Müller and Gangl 2003; OECD 2016b; Solga 2002). This is particularly relevant in times of economic downturn, as it tends to be the lowest educated who suffer the most in terms of unemployment and poverty risks (Gangl 2002; Aassve, Cottini and Vitali 2013; Lee and Painter 2013), and in terms of postponement of the transition to adulthood, in other words leaving the parental home, entering into a partnership and having children (Furstenberg 2010; Aassve, Cottini and Vitali 2013).¹ Evidence also suggests high chances of poor health among early school leavers (Eurofound 2012; Groot and Maassen van den Brink 2007).

Most studies on early school leavers focus on the predictors of becoming ESL (Borgna and Struffolino, 2017; Bowers, Sprott and Taff 2013; Byrne and Smyth 2010; Cabus and De Witte 2011; De Witte and Rogge, 2013; De Witte et al. 2013; European

¹ There is evidence suggesting that early school leavers progress faster into leaving the parental home, marriage, and parenthood in comparison to those who left school at ages 17–19 (Utomo et al. 2014). To our knowledge, there is no evidence of the effect of the economic crisis on these transitions specifically for ESL.

Commission 2010, Oreopoulos 2007; Ramsdal, Gjørsum and Wynnc 2013) and on its costs for individuals and societies (Belfield and Levin 2007; Brunello and De Paola 2014; European Commission 2013; Psacharopoulos 2007). More recently, there has been a proliferation of studies investigating the predictors of being NEET, a group of young people where ESL are disproportionately represented (Carcillo et al. 2015; Furlong 2006; Kelly and McGuinness 2015; Mascherini et al. 2012; OECD 2015).

So far, the literature has tended to focus on preventive strategies to avert early school leaving, while less attention has been given to transitions to a second chance among this population. This is a reflection of the relatively scarce prior research that exists on the labour market effects of participating in adult learning or gaining new qualifications among early school leavers. Similarly, at the political level there is little consensus on the effectiveness of later-life education interventions (Bukodi 2017). In addition, analyses highlighting the beneficial effects of gaining more qualifications for early school leavers are based on cross-sectional studies, where the higher-educated are compared to the lower-educated (Brekke 2014; OECD 2005). However, results obtained by comparing education groups do not automatically extend to individuals who gain new qualifications after having left education. This is because selection processes are likely to influence who gains an educational qualification directly and who does so after having spent some time outside the educational system (see also Solga 2002).

This paper contributes to the literature by exploring the trajectories of early school leavers in their 20s and early 30s to analyse the characteristics that are associated with participation in adult learning, and whether participants benefit from their learning in terms of improved employment outcomes. The country context for the research is Britain, which has followed a common trend in Europe in terms of the share of the population not holding an upper secondary education degree.²

² Whereas in 2005 this group represented 27 % of all individuals between 25–34 years old, in 2015 it was 15 % (OECD 2016a).

Background

Initial educational attainment is one of the key determinants of positive labour market outcomes. Its effects have been extensively discussed theoretically and tested empirically by different disciplines and theoretical frameworks. Evidence on the role of adult learning on labour market trajectories is less abundant and less conclusive, yet often associated by practitioners with higher chances of career progress among disadvantaged individuals (Bukodi 2017).

Institutional settings related to educational and labour market systems in the UK do not constitute barriers for individuals to participate in formal adult learning and to improve their chances in the labour market (Vono de Vilhena et al. 2015). The system is flexible and open enough to allow for enrolment of those who do not meet traditional entry requirements (McMullin and Kilpi-Jakonen 2014; Schuetze and Slowey 2002). This is reflected in the fact that the participation rate in formal adult learning for the UK is one of the highest in Europe (Dämmrich, Vono de Vilhena and Reichart 2014). Employment protection and welfare benefits are low, which provide good reasons for individuals to invest in lifelong learning.

Empirical studies exploring individuals' characteristics associated with participating in this type of education tend to include individuals with different educational and socioeconomic backgrounds. These analyses have shown that participation in adult learning (both formal and non-formal) is often associated with processes of cumulative advantage: individuals with higher educational resources and those in better employment positions are more likely to become adult learners and to benefit from it (Kilpi-Jakonen, Vono de Vilhena and Blossfeld 2015). Returning to formal education and participation in non-formal learning among lower-educated young people at high risk of marginalisation has not been studied extensively and so it is important to examine whether similar processes are at play within this group.

On the one hand, we may expect that the greatest need for further education and learning is for those young people who have left education with the very lowest levels of qualifications or none at all, and those who are not employed. On the other hand, early school leavers who have become integrated in the labour market, may be encouraged by their employers to seek further training – or their employers may offer

them training directly – in order to advance in their careers. Individuals who have experiences of employment may also be more motivated to seek further training opportunities than are those who have become more marginalised. In terms of prior education, the experiences of young people who have left the education system without an adequate lower secondary qualification may have had such bad experiences of schooling that their motivation to engage in further learning may be rather weak. Their opportunities in terms of the types of education that they can access may also be more limited than those of young people with complete lower secondary qualifications. Overall, despite the greater needs of the most disadvantaged, the presence of a Matthew effect among this group is still expected, meaning that those relatively more advantaged are more likely to participate in further education and learning.

Additionally, some studies cite that one of the reasons that young people leave education early is as an act of ‘rebellion’ (e.g., Davey and Jamieson 2003). In this case it could be expected that as these young people mature, they may want to return to education, and this effect may be particularly noticeable for young people who come from higher status backgrounds. Recent research has also established compensatory effects within higher status families, whereby relatively poorly performing children from these families are nevertheless more likely to advance in the educational system than their similarly performing peers from lower status families (Bernardi and Boado 2014). Across the whole range of educational qualifications, individuals coming from higher social origins have been found to be more likely to obtain further academic qualifications through adult learning than their counterparts from lower social origins, in particular when their own social class is lower than that of their parents (Bukodi 2017). These processes of compensation and counter-mobility are therefore expected to be evident among early school leavers and thus it can be expected that second chance education is more often accessed by young people coming from more advantaged backgrounds.

In terms of its impacts, adult learning is generally associated with improved employment outcomes (Blossfeld et al. 2014). A range of studies from the UK have analysed the labour market outcomes of adult learning from a life-course perspective. Most of these studies tend to find positive effects on employment chances, earnings and prestige mobility (Blanden et al. 2012; Dorsett, Lui and Weale 2010; Jenkins et al.

2003; Kilpi-Jakonen et al. 2012; McMullin and Kilpi-Jakonen 2014; Vono de Vilhena et al. 2015). It should also be highlighted that studies comparing individuals graduating at younger ages with mature graduates show a disadvantaged pattern for the latter, though these have mostly concentrated on university graduation (e.g., Elman and O’Rand 2004; Purcell, Wilton and Elias 2007).

So far, studies exploring career trajectories of dropout students are scarce (Schnepf 2017). The same is true for studies considering the effects of adult learning for these individuals (Nordlund, Bonfanti and Strandh 2015). Nordlund and colleagues (2015) studied the long-term effect of participating in formal education on income growth among early school leavers who were born outside Sweden using register data. Their results indicate a modest although long-term positive effect, which is attributed by the authors to the acquaintance of ‘Sweden-specific’ human capital like language or country-specific social competence, and not necessarily to the qualifications individuals obtained.

Evidence from previous studies thus indicates that early school leavers may advance substantially in the labour market after acquiring a new qualification. However, if the qualifications gained are at a low level or if the training received is of poor quality then these outcomes may be jeopardized. Due to the polarization of the labour market (Goos and Manning 2007), it may be that rather substantial investments into further education may be required before they pay off. For example, McMullin and Kilpi-Jakonen (2014) found that positive outcomes in terms of chances of being employed tend to be particularly beneficial for individuals gaining tertiary-level qualifications rather than those at the secondary level. More broadly, Dorsett and colleagues (2010) found that educational upgrading tends to increase employment probabilities and earnings more than gaining new qualifications that do not lead to upgrading. In order to gain a more comprehensive picture of the benefits of adult learning, the different levels of qualifications gained will therefore be disaggregated.

Data and methods

Sample and definition of ESL

We use the British Household Panel Survey (BHPS) for our study (University of Essex, Institute for Social and Economic Research 2010). The BHPS began in 1991, but we concentrate on the period from 1999 (wave 8) onwards, when more detailed questions about learning in the preceding year were introduced. The BHPS ended in 2008. We only use information from the years when individuals replied to the survey face-to-face, in other words proxy and telephone interviews are dropped because detailed questions related to learning were not included. Because we analyse transitions into learning and effects of learning over time, we drop observations that have no preceding or subsequent observation in the data. We also exclude individuals who had migrated to the UK above the age of 10 because they will not have attended the UK education system for most of their educational trajectories.

We define early school leavers as young people who left education with only lower secondary qualifications or none. More specifically, young people aged 16–27 who do not define themselves as students and who were not enrolled in education leading to a qualification in the previous year and whose level of education is below A-levels (or equivalent) are defined as ESL. Once they are observed in the data as ESL, they are then followed until age 30 (or exit from ESL or the latest year available) for participation in education and training, and until age 35 (or latest year available) for labour market outcomes related to education and training.

There are a total of 1,934 individuals who we define as ever being ESL using the definition above (within the sample defined in the first paragraph of this section) in comparison to 4,515 individuals in this same age group who are never ESL.³ In other words, of the 16–27 year old respondents 30 per cent are ESL in at least one wave. Out of the yearly observations, 22 per cent are currently ESL, rising from a low of 11 per

³ The maximum number of yearly observations that we have is 7,759 for participation and 10,618 for labour market outcomes.

cent among those aged 16 and 17 to 26 per cent among those aged 27,⁴ with most of the increase happening around the ages of 18 and 19. In comparison to young people not ‘currently’ ESL, the ESL are more likely to be employed (64 per cent of yearly observations compared to 51 per cent) but this is largely due to the fact that in this age group those who are not ESL are rather likely to be students (by definition 0 per cent for ESL, 36 per cent of yearly observations for those not ESL). The ESL are both more likely to be unemployed (14 versus 5 per cent) and more likely to be out of the labour force for reasons other than full-time education (19 versus 6 per cent).

Dependent variables

In order to analyse participation in adult learning, we use three dependent variables. Our first dependent variable is participating in non-formal learning that does not lead to a qualification (training) and the second one is enrolment in formal education. For both of these dependent variables we measure whether individuals report the specific type of learning in the following wave. Moreover, since formal learning often tends to be longer in length than training episodes, for this type of learning we focus on enrolment or entry, meaning that years when young people are already undertaking (or have undertaken) this type of learning are excluded. We observe 18 per cent of our sample to take part in training (in the following wave) until the age of 30, with 6 per cent of relevant yearly observations reporting training (in the following wave). Similarly for enrolment, 37 per cent of our sample are observed as enrolling (in the following wave), with 11 per cent of the relevant yearly observations. Finally, our third dependent variable is whether or not we observe individuals’ exit from ESL in the form of getting a qualification at the equivalent of A-levels or above. In comparison to the first two dependent variables, which are assessed as yearly transitions, for this third dependent variable we only measure whether this transition happens at all during the observation period. We observe 18 per cent of our sample exit ESL by the age of 30. Note though that this is likely an underestimation of the true population mean since we do not observe all individuals until the age of 30.

⁴ This compares quite well to the OECD’s figure of 27 % of individuals aged 25–34 in 2005 (OECD 2016a).

For labour market outcomes, we again examine three dependent variables. The first is employment (including self-employment) versus non-employment, which is assessed in the current wave. The second is entry into employment, which is assessed in the subsequent wave and those currently employed are excluded. In both cases we exclude students since including them tends to bias the effects of higher qualifications upwards (time spent as full-time students is time when one cannot be primarily employed) and potentially the effect of lower qualifications downwards in cases where lower qualifications lead to further educational participation. Finally, the third labour market related dependent variable is usual monthly earnings, for which we use the natural logarithm of inflation-adjusted earnings only for those employed (excluding self-employed).

Independent and control variables

As independent variables we include gender (50 per cent of the sample are female), a dummy for own children in the household, and the interaction of these two since children have a very different effect on the opportunities to participate both in learning and on the labour market for men and women. Ideally we would also differentiate according to the age of the (youngest) child but our sample is not large enough to do this. We also control for the age of the respondent.

In addition, we have measured the social origin of the respondent. Due to a large amount of missing information in the relevant questions, this variable uses information about parental social class (Erikson-Goldthorpe-Portocarero scheme), parental education and parental socioeconomic group.⁵ Despite the attempt to use all available information, a large number of respondents have missing information on this variable and so we have included them as a separate category. Young people who we identify as

⁵ Using the EGP schema, the categories were defined as high social origin being the salariat, medium social origin the intermediate classes, and low social origin the working class. If information of the EGP class of both parents was missing, their education level was used (tertiary level education classified as high, secondary level education classified as medium, and lower or none as low). Finally, if this too was missing, information on the socioeconomic group of the parents was used. In all cases, the dominance principle was used.

being ESL tend to come from lower social origins than their peers who are never ESL: only 18 per cent of young people who are ESL are defined as being of high social origin in contrast to 40 per cent among those who are never ESL; the percentages for middle origins are 32 among ESL and 30 among never ESL, for low social origins 40 among ESL and 25 among never ESL, and for unknown 10 among ESL and 5 among never ESL.

In models of participation, we also control for the highest level of qualifications that the young people hold as well as their labour force status. We distinguish three levels of education: good GCSEs (or equivalent),⁶ other qualifications (including apprenticeships), and no qualifications. Most young people (63 per cent) who are ESL enter the data with good GCSEs, while some (22 per cent) hold lower qualifications and a minority (15 per cent) have none. For labour force participation, we use the categories employed, self-employed, unemployed, full-time student (only in models for training), and outside the labour force. This last category also includes young people on government training schemes.

In models of labour market outcomes, we include several variables measuring the training and new qualifications that young people have obtained. We include the level of the highest qualification obtained if it is at A-levels or above in three categories: university degree, other qualification from higher education, A-level (or equivalent). For other new qualifications below this level, we measure their timing with three variables: reported in the current wave (i.e. obtained in the previous year), in the previous wave, and reported two waves previously. Similar variables are included for training that does not lead to a qualification.

We also attempted to identify young people of ethnic minority and (childhood) migrant backgrounds but found rather few young people with these characteristics among the respondents (approximately 2 per cent of the sample for each of these two categories). Given that these variables did not have statistically significant effects – potentially due to the small number of respondents involved – we have not included these variables in the final analyses.

⁶ The General Certificate of Secondary Education (GCSE) examinations are taken at the end of lower secondary education, in general around the age of 15.

Methods

The focus in our analyses of participation is on time-invariant characteristics of individuals even though in most cases we have several observations per individual. Therefore, we use random effects models for these dependent variables – and regular regression models for exit from ESL where we have one observation per individual. Although the dependent variables are binary, we have chosen to use linear probability models for ease of interpretation and comparability. We have also run the models as logistic regression models and produced average marginal effects. The two techniques usually produce similar results in terms of statistical significance though the exact size of the coefficients is slightly different. Substantial differences are commented on in the notes.

For the analyses of labour market outcomes, we are mainly interested in individual characteristics that are time-variant, in other words learning participation and new qualifications. For this reason, we present fixed effects models for these dependent variables. Again, we use linear probability models for the two binary outcomes and linear models for the continuous measure of earnings. We have also run the models as random effects models, both as linear probability models and logistic regression models with estimated average marginal effects. We comment in the notes when there are substantial differences between the results.

In addition, we tested our models by excluding individuals once they exit ESL status to see whether the effects of training and new qualifications below A-levels had a different impact on individuals who are (still) ESL compared to those who ever were ESL. There were very few differences between the models. We also tested our models including full-time students as non-employed. Substantial differences are commented on in the notes.

In order to test the robustness of our results with longer follow-up periods, we have also run our analyses for cases where we have information from five consecutive waves. In this case we tend to lose approximately half of the sample in terms of individuals but only about a fifth in terms of observations. By and large these analyses produced similar results as those that are reported.

Results

Participation in learning and exiting ESL

We begin by analysing participation in training, as reported in the following wave. The results for random effects linear probability models are shown in the first column of Table I. These results show that training participation perpetuates inequalities among the ESL with regard to labour force status, level of education and social origin. There is a small difference (1.9 percentage points) between the employed and unemployed in the yearly probability to participate and a slightly larger one between the employed and those outside the labour force (3.9 percentage points – the difference for students is 5.4 percentage points). Equally, those with qualifications below GCSEs or none at all are 3–4 percentage points less likely to take part in training. Young people from high social origins are estimated to be 2.5 percentage points more likely to participate than their counterparts from medium or low social origins. Gender, children and age do not have statistically significant impacts on training participation.

The results regarding enrolment in education leading to a qualification are presented in the second column of Table I. These results show rather fewer inequalities, though some are still present and they are potentially larger in size. Moreover, these results show that this type of enrolment is most concentrated among the youngest ESL. The largest difference is between young people with good GCSEs and those with no qualifications, estimated to be 6.0 percentage points in yearly enrolment rates. The estimated difference between those from high and low social origins is 4.0 percentage points.⁷ With regard to labour force status, there are hardly any significant differences: only the self-employed are less likely to enrol than the employed.⁸ Gender and children are not found to impact enrolment.

⁷ The difference is statistically significant at $p < 0.01$ for the logistic regression models as well as the marginal effects even though it is only significant at $p < 0.10$ for the linear probability model.

⁸ Again, this difference is statistically significant at $p < 0.01$ for the logistic regression models as well as the marginal effects even though it is only significant at $p < 0.10$ for the linear probability model.

Table I. Predictors of participation in different types of learning and exit from ESL

	Training	Enrolment in education	Exit from ESL
<i>Labour force status (ref. employed)</i>			
Self-employed	-0.010 (0.017)	-0.042* (0.024)	
Unemployed	-0.019** (0.009)	0.011 (0.012)	
Full-time student	-0.054*** (0.020)		
Outside the labour force	-0.039*** (0.009)	0.020 (0.013)	
<i>Level of education (ref. good GCSEs or equivalent)</i>			
Lower qualifications	-0.034*** (0.008)	-0.034* (0.018)	-0.023 (0.022)
No qualifications	-0.040*** (0.009)	-0.060*** (0.021)	-0.043* (0.026)
<i>Social origin (ref. high)</i>			
Medium	-0.025*** (0.009)	-0.019 (0.021)	-0.024 (0.026)
Low	-0.025*** (0.009)	-0.040* (0.021)	-0.028 (0.025)
Unknown	-0.008 (0.013)	-0.028 (0.029)	-0.029 (0.035)
<i>Gender (ref. male)</i>			
Female	0.005 (0.008)	0.007 (0.017)	-0.013 (0.021)
<i>Own children in the household (ref. no)</i>			
Yes	-0.003 (0.011)	0.001 (0.018)	0.002 (0.037)
<i>Interaction</i>			
Female*Children	-0.006 (0.014)	-0.030 (0.023)	-0.012 (0.043)
<i>Age (centred at 18)</i>			
	0.000 (0.001)	-0.009*** (0.001)	-0.011*** (0.003)
<i>Constant</i>			
	0.104*** (0.009)	0.258*** (0.020)	0.252*** (0.024)
Observations	7,759	6,995	–
Individuals	1,934	1,934	1,934

Random effects linear probability models for training and enrolment

Linear probability models for exit from ESL

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Finally, the third column of Table I presents the results for eventual exit from ESL. The background control variables for age and children used here as well as the level of education represent the situation from the first wave in which we observe the individuals as being ESL. Overall, there are rather few statistically significant predictors of exiting ESL, although the size of the coefficients is in many cases similar to those in the previous models. The only predictor that is significant at $p < 0.1$ is for no qualifications in comparison to good GCSEs for which the estimated difference is 4.3 percentage points. We can also observe that younger individuals are more likely to exit ESL, which is likely to reflect both the fact that younger people are more likely to enrol in courses leading to a qualification (as discussed above) and that the younger respondents are when we observe them, the longer we have the possibility to observe them for.

Labour market outcomes

We begin our analyses of labour market outcomes with employment. The first column in Table II presents the fixed effects linear probability models of being employed. The largest effects come from gaining a university degree (16.9 percentage points) and from A-levels (10.5 percentage points). Somewhat smaller effects come from a qualification at GCSE level or below (6.1 percentage points) and from training (4.4 percentage points), though these are only in the year that the qualification or training was obtained.⁹ The smallest significant effect comes from other higher education qualifications (3.4 percentage points). It should also be noted that the size of the effects for qualifications at ESL-level (as well as training) and those at A-level and above are not quite comparable since the former are estimated as yearly effects whereas the latter are carried forward, which assumes that their effect is constant across the years. With regard to control variables, there is a large negative impact of having children for

⁹ The effect for new qualifications at GCSE level or below is only significant in the models excluding students, suggesting that these qualifications tend to lead to further studies more strongly than to employment. Nevertheless, for those individuals who do not continue their studies, they do have a positive impact on employment chances. When students are included, the estimated effect of a university degree is also substantially larger, reflecting the fact that time spent studying for these qualifications is time away from being primarily employed.

women (31.4 percentage points). From random effects models (not shown) we can say that the difference in employment rates between childless men and women is negligible and not statistically significant. On the other hand, age increases the probability of being employed.

Table II. The influence of learning on different labour market outcomes

	Employment	Transition	Earnings
<i>University degree</i>	0.169** (0.075)	0.231*** (0.086)	0.321*** (0.096)
<i>Other higher level qualification</i>	0.034** (0.016)	0.046*** (0.015)	0.129*** (0.022)
<i>A-level</i>	0.105*** (0.028)	0.089*** (0.027)	0.115*** (0.038)
<i>Qualification at ESL-level (current year)</i>	0.061** (0.030)	0.056* (0.029)	0.036 (0.041)
<i>One year lag for qualification</i>	0.016 (0.023)	0.013 (0.021)	-0.020 (0.030)
<i>Two year lag for qualification</i>	0.011 (0.022)	0.008 (0.021)	-0.037 (0.029)
<i>Training not leading to a qualification</i>	0.044*** (0.013)	0.032** (0.012)	0.040** (0.016)
<i>One year lag for training</i>	0.004 (0.014)	-0.016 (0.013)	0.050*** (0.017)
<i>Two year lag for training</i>	-0.007 (0.015)	0.004 (0.014)	0.035* (0.019)
<i>Own children in the household (ref. no)</i>			
Yes	-0.031 (0.020)	-0.003 (0.019)	0.033 (0.027)
<i>Interaction</i>			
Female*children	-0.314*** (0.027)	-0.277*** (0.025)	-0.571*** (0.040)
<i>Age (centred at 18)</i>	0.010*** (0.002)	-0.002 (0.001)	0.047*** (0.002)
<i>Constant</i>	0.727*** (0.010)	0.793*** (0.010)	11.343*** (0.014)
Observations	10,391	8,423	6,705
Individuals	1,934	1,846	1,581

Fixed effects linear probability models for employment and transition into employment

Fixed effects linear regression model for (logged) earnings

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The second column presents the models for entry into employment in the following wave. These results largely reproduce those for employment more generally, meaning that they tend to be driven by entry into employment rather than just protecting those

who are employed from becoming non-employed. The main difference is that new qualifications have a slightly lesser impact, which is not significant in most of the various models tested. Age is also not significant in the fixed effects models, though it remains positive and significant in the random effects models (not shown).

The results regarding monthly earnings are presented in the third column of Table II. These models only include employed individuals and they tend to show that both qualifications at A-levels and above as well as training improve earnings, but new qualifications that are at GCSE-level or below do not. The most substantial increases happen, unsurprisingly, with university degrees (32.1 per cent) and somewhat lower increases with other higher education qualifications and A-levels (both approximately 12 per cent). Nevertheless, training also improves earnings (4–5 per cent), even with lags of at least one year, potentially even two years. These results hold – and the effects of the lags are somewhat larger and stronger – even when individuals do not exit ESL (not shown). With regard to the control variables, having children reduces the earnings of women and from the random effects models we can see that even among ESL, women tend to earn substantially less (20.7 per cent) than men (not shown). On the whole, even in this group earnings tend to increase as individuals age and gain more labour market experience.

Discussion and conclusion

This study contributes to the literature on early school leavers and on adult learning by analysing the characteristics associated with the participation of this population in learning activities after dropping out of school. It also contributes by exploring whether participants benefit from their learning in terms of improved employment outcomes. Young people without an upper secondary degree are particularly vulnerable in the labour markets of knowledge-based economies. Previous research has highlighted the potential benefits of returning to education for these young people without actually studying the group's labour market trajectories in relation to further education in greater detail.

Regarding returning to learning activities after becoming an ESL, the results confirm the general pattern of cumulative advantage found by the majority of research in the

field of adult learning (Kilpi-Jakonen, Vono de Vilhena and Blossfeld 2015): individuals who are better off are also more likely to participate in learning activities. In this sense, adult learning perpetuates inequalities with regard to labour force status, level of education and social origin among ESL. It is particularly noteworthy that young people with no qualifications, who should be those with the greatest need for further learning, are the least likely to take part in either training or formal education. It is likely that their prior experiences of schooling are such that they are discouraged from returning to it.

In addition, indications of higher-class compensation or counter-mobility were also found in that young people from higher social origins were more likely to take part in adult learning than their peers from lower social origins. However, these differences were maybe not quite as large as could have been expected from the previous literature. This may be due to the limitations in the way that social origins were measured or to real differences between early school leavers and young people with slightly higher educational qualifications. On the other hand, these results suggest that second-chance education is not subject to social inequalities to quite the same extent as regular formal education.

Interestingly, gender and children were not found to have an impact on learning participation. On the other hand, age seems to play a relevant role in terms of enrolment: the younger individuals are, the higher their chances to enrol in courses leading to a qualification and to eventually gain a qualification higher than ESL-level. This reflects more general findings that formal adult education tends to be undertaken mainly by younger people who have been out of the education system for shorter periods of time (Dämmrich, Vono de Vilhena and Reichart 2014).

The results also confirm previous studies on the positive effects of adult learning in the UK, in this case by boosting the chances of ESL in the labour market. However, for becoming employed the main benefit comes from new qualifications that are above ESL-level. On the one hand, training that does not lead to a qualification also tends to benefit early school leavers who are employed in terms of their earnings. This result also suggests that adult learning increases inequalities within the group of early school leavers as it is those who are in better positions (i.e. employed) who benefit from it the most. On the other hand, for this group adult learning, particularly in terms of training,

may compensate slightly for their lack of formal qualifications. New qualifications that do not increase individuals' level of education above ESL-level (i.e. qualifications at GCSE level or below) have a relatively uncertain impact for labour market outcomes. Their primary positive impact is likely to be increased access to higher levels of education that do then help in the labour market.

Despite the use of fixed effects models, which control for time-invariant individual heterogeneity, we cannot be fully sure of the causal nature of adult learning on labour market outcomes. Moreover, we cannot say for certain whether adult learning would have had the same impact for the individuals who did not participate. Different research designs are needed in order to better establish causality. Notwithstanding these limitations, our study does establish that over the (early) life course of individuals who once dropped out of education, further learning participation tends to be associated with improved labour market prospects even once various selection mechanisms have been taken into account.

Overall, this study indicates that efforts to provide ESL with a second-chance in education should be further promoted as it contributes to individuals' progress in the labor market. However, it also highlights social and educational inequalities in participation. Preventive programmes against students' dropout should be further promoted as the most disadvantaged are the least likely to re-enter education.

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