# Education or qualification? Analysis of the labour market access of secondary education students

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## Abstract

Transitions from the education system to the labour market are a key process in the lives of young people. This article explores the relative effect of educational attainment and post-compulsory schooling on various measures of labour market access in Spanish cohorts born between 1996 and 1998. To this end, logit models are used to exploit data from the most recent *Survey on the Transition from Education/Training to Labour Market Insertion* conducted by the Spanish National Institute of Statistics in 2019. The findings indicate that qualifications are more important in explaining employment outcomes in the first stage of young people's labour market access. Furthermore, young people who have remained in the education system at post-compulsory ages but not increased their qualifications are less likely to be active, employed, and have a permanent contract.

Keywords: transitions; education system; labour market; early school leaving; labour access

Resumen. ¿Escolarización o titulación? Análisis de la inserción laboral del alumnado de educación secundaria

Las transiciones entre el sistema educativo y el mercado laboral son un proceso clave en la población joven. Este artículo investiga el efecto relativo del nivel educativo alcanzado y de la escolárización en edad postobligatoria en distintas medidas de inserción laboral en las cohortes de nacidos entre 1996 y 1998. Para ello, se explotan los datos de la última edición de la Encuesta de Transición Educativo-Formativa e Inclusión Laboral, del Instituto Nacional de Estadística, publicada en 2019, a través de la aplicación de modelos Logit. Los resultados señalan la mayor relevancia de la titulación a la hora de explicar los resultados en la primera etapa de los jóvenes y las jóvenes en el mercado laboral. Además, los que han permanecido en el sistema educativo en edades postobligatorias sin incrementar su titulación tienen unas posibilidades más reducidas de encontrarse activos, ocupados y de tener un contrato indefinido.

Palabras clave: transiciones; sistema educativo; mercado laboral; abandono escolar; inserción laboral

## Summary

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## 1. Introduction

The transition from the education system to the labour market has been widely addressed in the literature, as it is a key process for understanding the material and symbolic rewards to be gained from different educational trajectories (Schoon and Heckhausen, 2019). As Sierra and Parrilla (2014) argued, such transitions involve highly complex socio-educational processes, since they may provide or preclude opportunities for people. Moreover, transitions cannot be understood as the result of rational and individual calculations, but as processes in which a variety of social factors intervene (Tarabini, 2022). Indeed, far from being linear and homogeneous, school-to-work transitions are characterised by their fragmentation, discontinuity, and diversification (Montes, 2021; Walther and Plug, 2006).

Analyses of transitions and educational and labour trajectories examine phenomena such as early school leaving or school failure to explain the economic and social effects of low schooling and/or low educational attainment (Alegre and Benito, 2014; Fernández Enguita et al., 2010; Fernández-Macías et al., 2013; Martínez García, 2009; Rumberger, 2011). Early school leaving refers to the percentage of young people aged 18 to 24 who have completed, at most, compulsory secondary education or lower and are not in a further education or training programme. Thus, it incorporates a dimension of educational outcomes (i.e., the level achieved), but also the notion of schooling,

since it takes into account the fact that an individual may take part in a training or educational programme (even if the completion of the programme does not exceed the minimum threshold to not be considered an early leaver in the future). School failure, on the other hand, is a less complex indicator and refers to the failure to achieve an established or standard level of education. Thus, school failure is defined as cases in which a person has not completed compulsory education, which in Spain corresponds to the first stage of compulsory secondary education (Educación Secundaria Obligatoria, ESO hereafter)<sup>1</sup> or its equivalent.

The main objective of this paper is to analyse the labour market outcomes of a group of Spanish secondary school students from the 1996, 1997, and 1998 cohorts with diverse educational and labour market trajectories. The cohorts include early leavers from ESO, those who graduated from ESO or post-secondary education (bachillerato in Spanish),<sup>2</sup> and those who have experienced more irregular trajectories involving the entry in and exit from the education system and labour market. Specifically, we examine the relationship between the academic qualification attained and amount of schooling at postcompulsory age and its effect on the probability of being active and employed in the labour market, as well as the possible effect of both dimensions on the probability of having a stable job.

To achieve our objectives, we propose a methodological design with various types of students who have undergone different educational trajectories in terms of the qualification obtained and level of education completed. To this end, we use data from the most recent Survey on the Transition from Education/ Training to Labour Market Insertion (Encuesta de transición educativa-formativa e inserción laboral, ETEFIL hereafter) conducted by the National Statistics Institute of Spain (INE) in 2019. ETEFIL collects longitudinal data on transitions from the education system to the labour market which have been scarcely exploited. Given that indicators of early school leaving and school failure encompass a range of very heterogeneous situations (Martínez García, 2015), this study aims to elucidate on the relative importance of the educational level attained and schooling at post-compulsory age on three key indicators of labour market access: being active, employed, and having a stable job. These comparisons are made under the premise that, although the European Commission has urged Member States to reduce early school leaving due to the important consequences it has in terms of employability and social inclusion, it is worth separating both dimensions (education and qualification) to estimate the influence of each one on individuals' labour trajectories. In short, the results can serve to analyse the phenomena of early school leaving and school failure in greater depth, highlighting the unequal trajectories and transitions

<sup>1.</sup> In Spain, education is compulsory from the age of 6 to 16. Compulsory secondary education (ESO) begins at the age of 12 and ends at the age of 16.

The bachillerato stage, or upper secondary education, is not compulsory in Spain and lasts two school years normally between the ages of 16 and 18.

of young people in the education system. In this regard, the article provides new insight by reconstructing the educational trajectories of three ETEFIL groups (ESO leavers, ESO graduates, and bachillerato graduates) so as to classify the study population by years of schooling and educational level attained, regardless of the group to which they belong. In other words, the analysis is constructed based on the three groups indicated above, but the information is integrated to examine the three cohorts according to their schooling and educational level.

The article is divided into five sections. Following the introduction, the scientific literature on transitions from the education system to the labour market (school-to-work transitions) are examined in the second section. The methodology is described in section three while the main results of the study are presented and discussed in the fourth section. Finally, the fifth section concludes.

## 2. Theoretical framework

The relationship between educational attainment, social origin, and social destination constitutes one of the traditional lines of research in the sociology of education and social stratification. Authors such as Goldthorpe (2014) have highlighted the utility of different economic and sociological theories in explaining how academic level mediates the relationship between social origins and social destinations. Thus, the correspondence between educational level and labour trajectory has been widely studied from various approaches, since differences in individuals' academic performance have often resulted in labour market inequalities which, in turn, have an impact on social mobility (Hout, 2020). In this line, the literature on transitions from the education system to the labour market is vast and addresses very diverse issues (Alexiadou et al., 2019; Blossfeld et al., 2015; Tarabini et al., 2018). This is because these transitions are not linear or homogeneous, but the result of very heterogeneous factors, such as gender (Struffolino and Borgna, 2021), ethnicity and nationality (Enriquez, 2017), socioeconomic background (Caro et al., 2015), characteristics of the labour market and macroeconomic environment (Pastore, 2019; Witteveen, 2021), or features of the education system itself (Levels et al., 2014). Likewise, transitions within the education system, as well as from the education system to the labour market, are diverse, as attested to by the patterns of fragmentation and de-standardisation occurring in recent decades (Du Bois-Reymond and López, 2003; Furlong et al., 2011). Similarly, García et al. (2022) and Serracant (2015) pointed out that non-traditional educational trajectories, which are marked by discontinuities and ruptures, have become increasingly common.

As Moreno et al. (2012) indicated, Spain is one of the southern European countries in which the rigidity of the education system translates into high dropout rates. Thus, dropping out of the education system and school failure are two phenomena closely related to the Mediterranean transitional model

(Walther, 2006). This problem affects people's labour and personal and economic trajectories, which are influenced by a set of socioeconomic variables. There are multiple, interconnected causes and consequences of early school leaving (Brown et al., 2021) which result in a variety of very heterogeneous situations. Therefore, as some authors have urged (Brunello and De Paola, 2014; Martínez García, 2015), it is necessary to analyse in greater depth the diverse casuistry and trajectories of this population group. In this regard, Cederberg and Hartsmar (2013) highlighted that the category of "early school leaver" masks a set of very heterogeneous situations. However, there is consensus in the literature on some patterns, among them the role of the social class of origin in decisions that mark the educational trajectories of young men and women (Fernández Enguita et al., 2010; Tarabini et al., 2022). As Tarabini and Curran (2015) argued, it is essential to understand the role of the *habitus* of students from low-educated families in order to analyse their educational decisions. Likewise, there is abundant literature showing that men are more likely to experience this socio-educational problem (Struffolino and Borgna, 2021), partly as a consequence of a socialisation process in which the construction of a masculine gender identity is associated to a lesser extent with the educational expectations of their social environment (Ingram, 2009). School experiences also have an important influence on academic outcomes, which in turn are related to the students' own itineraries in the education system (García and Sánchez, 2020).

Given the significant negative consequences of early school leaving for individuals and society as a whole in terms of employability, social inclusion and citizen participation, among others (Ross and Leathwood, 2013), tackling this phenomenon has become a priority for education, social and economic policy. In this regard, some studies have provided evidence that low educational attainment of the population leads to high social costs due to the loss of tax revenues associated with lower wages (Levin, 1972; Rouse, 2007). Waldfogel et al. (2007) showed that early school leavers are potentially more dependent on social transfers, and Hanushek and Woessmann (2010) found that lower educational attainment is associated with a significant loss in economic growth. These macro-social outcomes are the result of micro-social processes in which there is a correspondence between the social origins and social destinations of young people. For example, belonging to a family with a low education level is associated with fewer educational opportunities and reproduces the social inequalities of origin (Tarabini and Curran, 2015). Other studies have also shown that individuals with a lower level of education have a higher probability of engaging in delinquent behaviour (Lochner and Moretti, 2004; Machin et al., 2011), are at a higher risk of poverty (Campbell, 2015), and suffer poorer health (Chetty et al., 2016).

The literature on the consequences or effects of dropping out of the education system or having a low or inadequate education level has shown a positive relationship between educational attainment and labour market opportunities and the negative consequences of early school leaving or not achieving a given

level of education (Arum and Shavit, 1995; Brzinsky-Fay and Solga, 2016; Levels et al., 2014; Mazrekaj et al., 2019; Psacharopoulos, 2007; Rouse, 2007; Van Praag and Clycq, 2020). In this regard, the model proposed by Breen and Goldthorpe (1997) emphasises that students weigh the potential benefits and risks associated with each educational decision.

Earnings are one of the most widely studied outcomes of educational attainment, especially in the literature on economic returns to education (Dickson and Harmon, 2011). In general terms, each additional year of schooling represents a 9% return to investment (Psacharopoulos and Patrinos, 2018). According to OECD estimates, the earnings of the working-age population with an upper secondary education are 20% higher (OECD, 2016). For the United States, Rouse (2007) predicted a wage increase of 10% per year worked. For Estonia, Anspal et al. (2011) estimated that, once correcting for the probabilities of getting a job, the percentage gain in earnings relative to having upper secondary education is 35% for men and 46% for women. In this regard, Brunello and De Paola (2014) underlined the need to recognise early school leavers as a highly heterogeneous group and perform the appropriate calculations, such as wage returns per additional year of education taking into account more sociodemographic variables.

Higher educational attainment has positive effects not only on wages, but also on overall employment conditions (Gitschthaler and Nairz-Wirth, 2018). Numerous studies have pointed out that the higher the educational level, the lower the probability of being unemployed, although this relationship is not mechanical, as it depends on multiple contextual factors (Brzinsky-Fay, 2007; Ross and Leathwood, 2013). For the Norwegian case, Brekke (2014) showed that the probability of being employed is lower for dropouts than school completers. In a comparative study of the United States and Australia, Rumberger and Lamb (2003) reported that early school leavers spend longer periods when they are neither in the labour market nor receiving education or training. Using a natural experiment, Cahuc et al. (2021) found that, when searching for a job, those who have some kind of official degree or skill certification (compared to those who do not) are more likely to get a job interview. Moreover, the authors showed that the effect of having a qualification is stronger than accrediting previous work experience.

In a study of Belgian youth, Van Praag and Clycq (2020) repeatedly found mismatches between expected and actual job opportunities and that early school leavers without sufficient educational qualifications find themselves immersed in a continuous process of searching for and changing jobs that does not allow them to progress and where they constantly encounter difficulties and high job insecurity. In a similar line, Nairz-Wirth and Gitschthaler (2020) argued that these young people tend to have lower job expectations and lower self-esteem. For the Spanish case, Salvà-Mut et al. (2016) conducted a 10-year longitudinal study in a cohort of young people aged 26–28 years who did not complete compulsory secondary education (ESO). The authors showed that, compared to young people who complete this educational level, early school

leavers have lower labour market participation, insufficient income, poorer working conditions and, in general, work situations that put them at a higher probability of being at risk of poverty. Additionally, Martínez García (2015) indicated that differences in unemployment rates by level of qualification have grown since the 2008 crisis, and that the sharp reduction in the number of people without compulsory secondary education makes them a particularly vulnerable group in the labour market. Moreover, as Van Caudenberg et al. (2017) pointed out, young people often face a dilemma between prioritising education or employment, since both domains create expectations about subsequent labour market success and job stability.

Gender is one of the most important variables when studying educational trajectories and their subsequent effects. Although there is consensus that early school leaving and school failure are mainly male phenomena (McNeal, 2011) and that women's educational attainment has continued to increase in recent decades (Blossfeld, 2019; Breen et al., 2010), it should be noted that women who leave school without sufficient qualifications are the most disadvantaged. For the Spanish case, Salvà-Mut et al. (2016) noted that female school leavers who have not completed compulsory secondary education are the most vulnerable group in terms of their immediate labour market trajectory, as they have the highest unemployment and lowest employment rates. Similarly for Italy, Struffolino and Borgna (2021) showed that women who leave school without having completed upper secondary education are more likely than men to have part-time contracts and experience higher levels of job precariousness.

In sum, the literature on the effects of early school leaving or school failure reveals two types of evidence. First, that such circumstances strongly condition the employment trajectories of young people and negatively affect their employment opportunities and job conditions. Second, given the marked heterogeneity of these situations, it is necessary to consider different criteria when examining the employment trajectories of those who drop out of and fail in the education system.

## 3. Methodology

#### 3.1. Data

To conduct the analysis, we use the second Survey on the Transition from Education/Training to Labour Market Insertion (ETEFIL) conducted by the INE in 2019. For purposes of comparison, the intervention was carried out in three study groups and three age cohorts (individuals born in 1996, 1997, and 1998) who had completed either post-compulsory secondary education (bachillerato) or compulsory secondary education (ESO) or who had dropped out of ESO in 2014, regardless of their subsequent education and labour market entries and exits. Therefore, the cohorts include individuals who were in (or had left) secondary education in 2014 and were 20-23 years old at the time of the

	1996	1997	1998	Total
Bachillerato diploma	3,828	_	_	3,828
ESO diploma	441	1,024	4,799	6,264
ESO leaver	369	470	818	1,657
Total	4,638	1,494	5,617	11,749

Table 1. Distribution of cohorts by year of birth and education

Source: Authors' own elaboration based on data from the Survey on the Transition from Education/Training to Labour Market Insertion (ETEFIL, 2019).

survey (2019), that is, at an early stage of their working careers. The sample comprises a total of 11,749 respondents distributed as shown in Table 1.

Graduates of intermediate and advanced vocational training cycles have been excluded from the sample. In the first case, because ETEFIL includes a small number of respondents (most born in 1994 and 1995), and in the second case, because the survey does not include any individuals born in the selected years.

## 3.2. Method and variables

As regards the method, several logit models were constructed, since they allow for the use of categorical variables in a manner equivalent to linear models (Escobar Mercado et al., 2009). A total of 15 models are estimated using three dependent variables as follows:

- Active: measures the probability that the person is of working age (1) or not (0) at the time of the survey.
- Employed: measures the probability that the person is working (1) or not (0) at the time of the survey.
- Stable: measures the probability that the person has a permanent contract or is self-employed with dependants (in both cases the variable takes the value of 1 and 0 otherwise).

Five specifications were estimated for each model and each dependent variable to test the consistency of the effect of the study variables on each of the dependent variables. First, all observations were included (pooled model 1) regardless of year of birth. Second, year of birth was included as a covariate in the estimation (pooled model 2). In addition, a specific model that only includes those born in 1996 (1996 cohort model), another for those born in 1997 (1997 cohort model), and a last one that only includes those born in 1998 (1998 cohort model) were estimated separately. This process is then repeated for the three dependent variables. The models were specified using Stata and compared by means of the likelihood ratio test and Bayesian information criterion following Long and Freese (2006) and Escobar Mercado et al. (2009).

To achieve the main objective of this study, two independent variables have been included to capture the two dimensions under study. Firstly, we include the variable *education*, which captures the number of years the individual attended school after the post-compulsory age (16 years old) grouped into three levels (2 years or less, 3 to 5 years, and more than 5 years). Secondly, we include the variable *qualification*, which refers to the highest qualification the individual attained at the time of the survey: bachillerato or equivalent; ESO or equivalent, or lower than ESO. The inclusion of these two variables, which are constructed according to each young person's educational trajectory for the period 2014–2019, improves the precision of the analysis since it homogenises the sample, which includes various population groups (ESO dropouts, ESO graduates, or bachillerato graduates) with respect to their starting situation in 2014. This allows us to obtain updated information on the level of qualification and years of education at the time the survey was conducted (2019). In addition, the predicted probabilities of the dependent variables and their relationship with the two dimensions under study – education and qualification – have been estimated to analyse the results and for ease of interpretation (Jann, 2014).

All the models include a set of covariates that help to explain the probability that the phenomenon under study will occur, in this case different measures of the labour market access of secondary school students. Firstly, we include the variable sex. As numerous studies have shown, gender is a variable that presents persistent inequalities in education and labour market participation (Struffolino and Borgna, 2021). Nationality has also been included, as there is wide consensus that students of immigrant origin or with a nationality other than that of the country in which they are schooled have poorer academic performance and educational outcomes (Miyar-Busto, 2017). The region or territory of residence is also commonly included in analyses that explain inequalities in educational outcomes, and which in the case of Spain reproduce spatial patterns of other variables of a socioeconomic nature (Miret, 2022). For this work, we have included the classification used by Bayón-Calvo et al. (2020), which establishes three groups of autonomous communities or regions according to different variables related to their socio-demographic and economic composition, such as the proportion of the population that has completed at least an ESO-level education, the youth unemployment rate, the percentage of foreign nationals, and the share of population at risk of poverty and social exclusion.

Fathers' and mothers' academic attainment is a common measure of families' socioeconomic status since it has an impact on the educational outcomes and choices of their children. More specifically, the higher the academic attainment of the parents (especially the mother), the longer the children will remain in the education system and the better their outcomes will be (Boonk et al., 2018). We include the variables father's education and mother's education separately, which capture fathers and mothers, respectively, who have completed a level of schooling equal to or higher than primary education.

Type of school has also been included through the variable *Tschool*, which captures having been educated in a private or subsidised school as opposed to a public school. In this regard, there is a certain consensus in the literature that the possible positive effect of having received a private education is almost completely absorbed if the socioeconomic origin of the students is taken into account (Albert and García-Serrano, 2010). We also include a measure of the opportunity cost of studying through the variable *ESOwork*, which identifies students who have engaged in some paid work during the compulsory secondary education stage. Often, the proliferation of jobs requiring a low qualification affects the transition from the education system to the labour market, leading some students to opt for early school leaving during upturns in the economic cycle (Aparicio-Fenoll, 2016). Finally, we control for year of birth. The distribution of the variables is shown in Table 2.

### 4. Results

This section presents the results obtained. Table 3 shows the odds ratios (OR) of the estimated models where ORs less than 1 indicate a negative relationship between the variables and ORs greater than 1 indicate a positive association between the variables. The models are grouped according to the three dependent variables used: *active*, *employed*, and *stable*. Likewise, five types of specifications have been estimated for each dependent variable: three separate specifications for the 1996, 1997, and 1998 birth cohorts and two grouped models with and without the year of birth as an independent variable. The independent variables are shown in the left-hand column of the table with the reference category indicated in parentheses. Thus, for example, the OR of having an ESO diploma compared to those who do not have an ESO diploma is 1.81545 in the grouped model 1 for the dependent variable *active*. Therefore, having an ESO diploma increases the odds of being active compared to not having an ESO diploma.

Overall, there is a high degree of consistency in the sign of the coefficients and in the level of significance of some of the variables. First, we will focus on the relationship between the two variables under study (qualification attained and level of post-compulsory education) and the dependent variables. We show the predicted probabilities of the dependent variables in those relationships where the qualification and education variables are significant. As can be seen in Figure 1, the qualification attained and post-compulsory educational level have an inverse and significant relationship with the probability of being active. On the one hand, having an ESO (compulsory) or bachillerato (post-compulsory) diploma or equivalent as opposed to not having either increases the probability of being active at the time of the survey. This result is in line with Rumberger and Lamb (2003), who estimated that school leavers who have not completed compulsory secondary education experience longer periods of inactivity and unemployment. On the other hand, more years of education at the post-compulsory age lowers the probability of being active. Both results

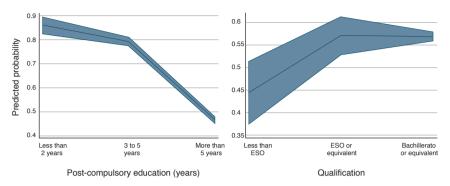
Table 2. Distribution of variables in the sample

	Individuals (N)	Percentages
Qualification: Highest qualification attained		
Less than ESO	883	7.5%
ESO or equivalent	1,171	10%
Bachillerato or equivalent	9,695	82.5%
Education: Years of education at post-compulsory age		
2 years or less	1,313	11.2%
3 to 5 years	2,657	22.6%
More than 5 years	7,779	66.2%
Sex		
Male	5,754	49%
Female	5,995	51%
Nationality		
Spanish	11,052	94.1%
Other	697	5.9%
Autonomous community (region)	-	
Group 1 (Andalusia, Canary Islands, Castilla-La Mancha, Extremadura)	2,947	26.2%
Group 2 (Asturias, Balearic Islands, Castilla y León, Valencia, Galicia, Murcia)	3,776	33.6%
Group 3 (Aragón, Cantabria, Catalonia, Madrid, Navarre, Basque Country, Rioja)	4,530	40.3%
Father's education: Highest level attained by father		
No schooling	365	3.5%
Primary education	1,117	10.8%
Compulsory secondary education (ESO)	2,693	26.1%
Post-compulsory secondary education (bachillerato)	2,332	22.6%
Higher education	3,802	36.9%
Mother's education: Highest level attained by mother		
No schooling	277	2.5%
Primary education	934	8.6%
Compulsory secondary education (ESO)	2,595	23.8%
Post-compulsory secondary education (bachillerato)	2,720	25%
Higher education	4,364	40.1%
Tschool: Type of school	· · · · · · · · · · · · · · · · · · ·	
Public	6,878	58.5%
Private	4,871	41.5%
ESOwork: paid work during compulsory secondary education		
Yes	693	5.9%
No	11,056	94.1%
Year	,	
1996	4,638	39.5%
1997	1,494	12.7%
1998	5,617	47.8%

Source: Authors' own elaboration based on data from the Survey on the Transition from Education/Training to Labour Market Insertion (ETEFIL, 2019).

1.

Figure 1. Predicted probability of being active as a function of post-compulsory education and qualification (grouped model 1)



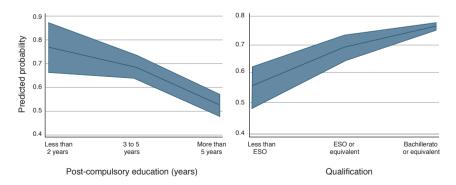
Note: Predicted probability at the 95% confidence level.

Source: Authors' own elaboration.

are compatible with the dynamics reported in the literature, since more post-compulsory education implies an opportunity cost in the labour market, thus explaining the negative and significant coefficients found.

Figure 2 for the second grouped model displays same the inverse relationship mentioned above. It should be noted that the dependent variable in this case is *employed*, (i.e., to be working) and that the estimation is performed only with individuals who are active. Therefore, active individuals with an ESO diploma are more likely to have a job, and this probability is even higher in

Figure 2. Predicted probability of working as a function of post-compulsory education and qualification (grouped model 2)



Note: Predicted probability at the 95% confidence level.

Source: Authors' own elaboration.

Table 3. Results (odds ratios) of logit models

		Depende	Dependent variable: active	: active			Dependen	Dependent variable: employed	employed			Depend	Dependent variable: stable	: stable	
	Grouped 1	Grouped 2	Cohort 1996	Cohort 1997	Cohort 1998	Grouped 1	Grouped 2	Cohort 1996	Cohort 1997	Cohort 1998	Grouped 1	Grouped 2	Cohort 1996	Cohort 1997	Cohort 1998
Qualification (ref.: less than ESO)															
ESO or equivalent	1.81545***	1.62333**	1.63716	2.00277*	1.72969	1.88656***	1.88656*** 1.80703*** 1.75033	1.75033	2.10233* 1.53158	1.53158	1.34962	1.27906	0.58654	1.53143	1.88686
Bachillerato or equivalent	1.79808**	1.40684	1.56504	2,99568**	1.20634	2.85328***	2.62728*** 2.93017***	2.93017***	2.86954** 2.23704**	2.23704**	1.24675	1.21221	0.72349	1.63575	1.46400
Education: Number of years of post-compulsory education (ref.: 2 years or less)															
3 to 5 years	0.61530**	0.65374**	0.60027	0.453344** 0.78843	0.78843	0.79668	0.82323	0.59451*	0.63447	1.44197	0.66358*	0.69751*	0.54982*	0.75087	0.81296
More than 5 years	0.13262***	0.16652***	0.20678 ***	0.20678 *** 0.13643***	0.13168***	0.53798***	0.53798*** 0.58141*** 0.48675**	.48675**	0.43266*	0.78963	0.33399***	0.36965***	0.33399*** 0.36965*** 0.30594***	0.47501*	0.3589**
Sex (ref.: male)															
Female	1.10071*	1.06831	1.19888*	0.85024	1.05721	0.80525***	0.80525*** 0.79355*** 0.98814	0.98814	0.67457*	0.65766***	0.87893	0.86837	0.81339*	0.84269	1.02055
Nationality (ref.: Spanish)															
Other	1.38472**	1.33987**	1.00212	1.18943	1.76619***	1.06543	1.05758	1.31319	0.96133	0.93251	1.50292**	1.45778**	1.68312*	1.49965	1.06384
Autonomous community (ref.: Group 1)															
Group 2 (Asturias, Balearic Islands, Castilla y León, Valencia, Galicia, Murcia)	1.19601**	1.22246*** 1.25690 *	1.25690 *	1.19123	1.19843*	1.51941***	1.51941*** 1.52851*** 1.60510*** 1.31685	1.60510***		1.49708**	1.26451*	1.28024*	1.70556*** 1.07415	1.07415	0.87356
Group 3 (Aragón, Cantabria, Catalonia, Madrid, Navarre, Basque Country, Rioja)	1.52558***	1.58529*** 1.65799*** 1.37609	1.65799***	1.37609	1.56458***	1.72166***	1.72166*** 1.74457*** 1.62554*** 1.91664** 1.81930***	1.62554***	1.91664**	1.81930***	1.48524***	1.50600***	1.48524*** 1.50600*** 1.65958*** 1.36196	1.36196	1.39599
Father's education: Highest level attained by father (ref.: no schooling)															
Primary education	-0.09785	0.90237	0.97134	0.59435	0.97808	0.99274	0.98487 (	0.96687	0.72255	1.12689	1.46431	1.46762	0.96261	4.60259**	1.16815
Mother's education: Highest level attained by mother (ref.: no schooling)															
Primary education	1.00099	0.98443	1.22496	0.72985	0.96109	1.25676	1.25461	1.42267	1.29296	1.059	0.82573	0.83426	1.35811	0.64539	0.64352
Tschool: Type of school (ref.: public)															
Private	0.85215***	0.89449*	0.84033 *	0.86917	0.96505	1.02838	1.04389	1.04263	0.91058	1.10034	1.01157	1.02285	1.04544	0.90633	1.08496
ESOwork: Paid work during compulsory secondary education (ref.: no paid work during ESO)															
Paid work during ESO	3.27894***	2.89951*** 2.79663 *** 1.75468	2.79663 ***	1.75468	3.36433 *** 1.35485* 1.32572* 1.42961*	1.35485*	1.32572*		0.96031 1.33681		1.29387*	1.29576*	1.29576* 1.38255 * 1.26083	1.26083	1.11521
Year (ref.: 1996)															
1997	1	0.80947*	1	1	1	1	- 1.01842	1	1	ı	ı	- 1.38249**	1	1	1
1998	I	0.43356***	ı	I	ı	I	0.77143***	ı	I	I	ı	0.81485*	ı	ı	ı
Note: * Significant at 90%, ** significant at 95%, *** significant at 99%	ficant at 9	5%, *** sig	Inificant a	t 99%											

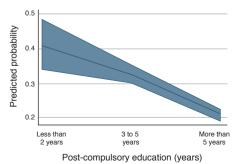
Source: Authors' own elaboration.

cases for those who have a bachillerato diploma. On the other hand, among those who are active, individuals with more years of education are less likely to be employed. This result differs from that of the dependent variable *active*, since the estimation does not include individuals who are inactive. Hence, having a qualification appears to be a stronger determinant of being employed than education, which shows an inverse relationship.

Let us recall that more years of education at the post-compulsory ages do not lead to higher educational attainment nor necessarily translate into higher qualifications. On the contrary, it may be a clear indicator of educational trajectories that have been extended due to problems such as repeating and school failure, as well as erratic entries and exits from the education system that have not translated into a higher academic level. In this line, Brzinsky-Fay (2007) reported that in Spain, like in other southern European countries, school-towork transitions are characterised by longer periods of unemployment and inactivity. This may also be explained by the fact that some students remain longer in the post-compulsory stages of education since the available labour market opportunities do not match their expectations, as Van Praag and Clycq (2020) found. In any case, it seems clear that level of education has a positive influence, at least in the early stages of employment.

As for the models in which the dependent variable is stability (i.e., having a permanent contract), having a qualification is not significant in any of the estimations. Figure 3 shows only the predicted probability of having a stable contract as a function of post-compulsory schooling. As can be seen, the direction of the relationship is similar to the previous estimations. The more post-compulsory education individuals have (regardless of the educational level they achieve), the lower the probability of obtaining a stable or permanent contract. In this case, it is worth recalling that the estimations only include employed individuals, so neither inactive nor unemployed individuals are considered. Therefore, more education may be

Figure 3. Predicted probability of *stable* as a function of post-compulsory schooling and qualification (grouped model 2)



Note: Predicted probability at the 95% confidence level.

Source: Authors' own elaboration.

associated with temporary jobs that allow students to combine work and study. By contrast, early leavers have more time and work experience, thus permitting greater stability. In line with Van Caudenberg et al. (2017) and Van Praag and Clycq (2020), some young people, especially early leavers, perceive that a quick labour market entry can help them attain a more secure job position.

In short, having a qualification appears to be associated with a higher probability of being active and having a job, while post-compulsory education leads to short-term outcomes that reduce the likelihood of being employed or having a stable contract at an early age. Indeed, it is likely that, for the same age and same educational level attained, those with less education have been in the labour market longer and gained useful experience and skills for job promotion or stability, as opposed to those who remained in the education system for a longer time but were unable to attain a higher educational level. This result confirms the uncertainties concerning the expected added value of educational qualifications, on the one hand, and labour market experience on the other, as reported by Van Praag and Clycq (2020). This finding is further supported by the significance of the variable that captures having had a paid job during compulsory secondary education (ESO). In this sense, having had formal or informal but paid work experience increases the likelihood of being active, employed, and having a stable job contract at the time of the survey.

The results of the covariates included in the estimations are also worth highlighting (see Table 3). First, with respect to sex, being female reduces the odds of working among those who are active in four of the five models estimated as well as the odds of having a stable contract, although this relationship is only significant in the case of the 1996 birth cohort. However, being female is also associated with being active in the labour market in two of the five models. Therefore, it is likely that the proportion of unemployed females of these ages is higher than in the case of males. These results support the evidence found in Salvà-Mut et al. (2016) and indicate that there are already notable gender inequalities in the early employment stages, despite the tendency of women to attain higher educational levels and experience less school failure and lower dropout rates in recent decades (OECD, 2015).

The variables in which the autonomous communities (or regions) of residence are grouped together show a high degree of significance. For example, taking as a reference the group that includes the regions of Andalusia, the Canary Islands, Castilla-La Mancha, and Extremadura, the results indicate that belonging to any of the other two groups increases the probability of both being active and having a stable job. This result also reflects a certain push and pull between the education system and the labour market, since the apparently better labour market access at early ages in this group of reference regions is related to the low demand for skilled employment (Díaz-Serrano and Nilsson, 2020). As for nationality, non-Spanish nationals are more likely to be active in the labour market, possibly due to the higher educational levels Spanish nationals attain at these ages.

It is also noteworthy that the inclusion of different measures of fathers' and mothers' educational attainment did not yield significant results. Having

a father with a primary education (as opposed to no schooling) significantly increases the probability of having a permanent job contract only for the 1997 cohort when the dependent variable is *having a stable contract*. Similarly, studying in a private or subsidised school does not have a strong effect on the variables of interest in this study. A significant and negative relationship was found for the variable *active* in only three of the five models estimated. In other words, having studied in a private or subsidised school reduced the probability of being active in the labour market at the time of the survey.

It is important to note that the results have some limitations. Firstly, although broad, the sample comprises a group of young people between 20 and 23 years of age at the time of the survey, so it is not possible to analyse the long-term outcomes of their employment history. In this sense, it would be highly advisable to have other longitudinal databases that would allow covering a longer period. Secondly, given that the educational trajectories and profiles are very heterogeneous (especially in the bachillerato stage) further analyses are needed to complement the results of this study. Third, some of the variables may lead to biases that merit attention. For example, we have used the variable nationality because we have more data on this variable. However, future studies could also include variables related to the father's and mother's country of origin. Likewise, the independent variables related to employment do not distinguish between skilled or unskilled employment, and the variable related to work during ESO does not differentiate between regulated and unregulated employment. Likewise, the variable that captures type of school permits only two responses (public or private), does not distinguish between private and subsidised schools, and excludes mixed educational trajectories, that is, students who have attended both types of schools. Fourth, and related to the previous points, it would be interesting to have databases of administrative records in addition to survey data to collect more complete information on educational and employment trajectories.

#### 5. Conclusions

This article has examined the role of the educational qualification attained and post-compulsory education in the labour market access of youth. The results confirm the unequal effects of the educational trajectories of a sample of 11,749 young people aged 20 to 23 years in 2019. Firstly, having completed either compulsory or post-compulsory secondary education increases the likelihood of being active and employed in the labour market. Additionally, schooling at post-compulsory ages shows, in general terms, a negative relationship with the different measures of labour market access (i.e., being active, employed, and stable). Although it is to be expected that young people who spend more years in education tend to remain inactive at ages when there is an opportunity cost of being employed, they also show a higher probability of being employed (among the active) and having stable employment (among the employed). This suggests that early school leavers have been able to

enter the labour market earlier and that their work experience and knowledge of the mechanisms for achieving job stability and promotion in different sectors explain the higher probability of having stable contracts. However, young people who have remained longer in the education system but were unable to attain a higher educational level present worse results in terms of employability and job stability. Having had previous work experience (regulated or not) during the ESO compulsory education stage also increases the likelihood of being active and having a permanent job. Nonetheless, possible biases due to the lack of data that differentiate between skilled and unskilled employment should be taken into account. The evidence presented in this paper is in line with Van Caudenberg et al. (2017) and Van Praag and Clycq (2020) as it suggests that opting for early labour market entry rather than continuing in the education system without attaining a higher educational level - even among those without a basic educational qualification – can have a positive effect on young people's future employability. Thus, in the short term, early labour market entry translates into a reward in terms of labour market access and stability. Therefore, in accordance with Breen and Goldthorpe's (1997) model, the young men and women in our study would be making educational decisions considering the costs and benefits of not continuing to study unless such decisions increase their educational attainment levels.

These results can be of aid in designing measures to address phenomena such as early school leaving. Nonetheless, it is important to bear mind that that the indicator early school leaving conceals a number of diverse and heterogeneous trajectories that can make it difficult to implement targeted measures and policies. In this regard, compensatory measures aimed at helping early school leavers without sufficient qualifications return to education should prioritise the attainment of a higher qualification rather than just schooling to improve the employment options of these individuals.

Moreover, young people's educational decisions seem to have an effect already at the beginning of their working careers. However, such effects may also be long term, since the results reveal that prolonging post-compulsory secondary education substantially reduces the chances of graduating at that stage (Valdés, 2022) and that the effects of not graduating may be carried over to further stages of employment. In any case, longitudinal data covering longer periods would be necessary to verify these results in the long term.

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