

# **Journal of Vocational Education & Training**



ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/rjve20

# Reasons for dropping out of intermediate vocational education and training in Spain: the influence of sociodemographic characteristics and academic background

Antoni Cerdà-Navarro, Elena Quintana-Murci & Francesca Salvà-Mut

**To cite this article:** Antoni Cerdà-Navarro, Elena Quintana-Murci & Francesca Salvà-Mut (2024) Reasons for dropping out of intermediate vocational education and training in Spain: the influence of sociodemographic characteristics and academic background, Journal of Vocational Education & Training, 76:3, 619-643, DOI: 10.1080/13636820.2022.2049625

To link to this article: <a href="https://doi.org/10.1080/13636820.2022.2049625">https://doi.org/10.1080/13636820.2022.2049625</a>

	Published online: 06 Mar 2022.
	Submit your article to this journal $oldsymbol{oldsymbol{\mathcal{Z}}}$
ılıl	Article views: 494
Q <sup>L</sup>	View related articles ☑
CrossMark	View Crossmark data ☑
4	Citing articles: 6 View citing articles 🗗





# Reasons for dropping out of intermediate vocational education and training in Spain: the influence of sociodemographic characteristics and academic background

Antoni Cerdà-Navarro , Elena Quintana-Murci and Francesca Salvà-Mut

Department of Applied Pedagogy and Psychology of Education, University of the Balearic Islands, Palma, Spain

### **ABSTRACT**

This article analyses the main reasons for dropping out of Spanish Intermediate Vocational Education (IVET) and the link to personal (sex, ethnicity, age), family (parents' educational level) and financial sociodemographic characteristics, as well as academic background (repeating or expulsion). To do this, a cohort of IVET students was monitored over three years via three questionnaires presenting the results for students who, over the monitoring period, dropped out without obtaining the corresponding qualification. The study was carried out in a Mediterranean region (Mallorca) with the highest levels of school dropout in Spain and an economy essentially centred on tourism. Results show that the most important reasons for dropping out are finding a job or wanting to find one, obtaining bad results and wanting to do other courses. The analysis highlights differences in reasons for dropping out by sex, ethnicity, age, the perception of financial difficulties and previous academic background. The findings suggest that educational interventions aimed at reducing dropout at this level of education should take into account the heterogeneity of student profiles as well as the limitations of the quantitative perspective in analysing students' reasons for dropping out.

### **ARTICLE HISTORY**

Received 30 July 2021 Accepted 25 February 2022

### **KEYWORDS**

Vocational education and training; vocational guidance and counselling; early leaving from education and training; educational inequalities: transitions

### Introduction

# Early leaving from education and training

Tackling Early Leaving from Education and Training (ELET) is one of the main objectives of education, social and labour policies in the European Union (EU) due to the major repercussions it has, both individually and socially. ELET is one of the highest risk factors for inactivity, unemployment, job insecurity, poverty and social exclusion (Cedefop 2016a; Verd, Barranco, and Bolíbar 2019). Spain



has one of the highest ELET rates in the EU, sits at 17.3%, compared to 10.3% for the EU as a whole (EUROSTAT 2019a). However, the Spanish average does not represent the variability between regions. For example, in regions such as the Basque Country or Madrid, these rates are 6.7% and 11.9% respectively, while in the Balearic Islands (the region where this study was carried out) or Melilla the incidence is much higher, 24.2% and 24.1% (National Institute of Statistics [NIE] 2019).

Furthermore, the educational attainment level of the Spanish population is strongly polarised characterised by a higher number of people with low qualification levels (ISCED<sup>1</sup> 0-2: 32.3% v. 13.6% in the EU) and a lower number of individuals with intermediate studies in comparison with another European countries (ISCED 3-4: 23.4% v. 43.5% in the EU) (OECD 2019). The education level attained has a huge impact on youth school to work transitions and the characteristics of their future employment pathways. More specifically, youth with low levels of education show higher levels of unemployment and a greater incidence of job insecurity.

Although Spain has high levels of youth unemployment compared to the European average, standing at 24.7% in 2019 (11.2% in the EU), this rate is even higher among young people with low level of education: 34.3% ISCED 0-2, 25% ISCED 3-4 and 16.7% ISCED 5-8 (EUROSTAT 2019b). Moreover, a recent study carried out in Spain on youth educational and training transitions concludes that 58.1% of dropout students have a salary of less than 1000 euros, 67.7% work in the service sector and in low-skilled occupations and 48.4% have temporary jobs, being this precariousness more prevalent in the case of women (NIE 2020).

# Vocational education and training as strategic field for intervention

In this scenario, many studies highlight the strategic importance of vocational education and training (VET) to prevent ELET and reducing youth unemployment (Cedefop 2016a, 2020a; Marhuenda-Fluixá 2019; OECD 2019). Nonetheless, despite efforts to bolster VET in Spain, vocational training is characterised by a low participation, stigmatisation and high dropout rates.

The Spanish VET system is organised in three levels: basic VET (BVET), intermediate VET (IVET) and higher VET (HVET) (all levels with a duration of two academic years). BVET was established in Spain in 2014-2015 and is geared towards students who have not completed compulsory secondary education (ISCED 2) and are at risk of leaving education as a vocational option, in order to reduce ELET and to ensure youth permanence in the educational system. Those who attend BVET start this training at the age of 14 and, at the end, receive a VET Level 1 credential which enables students to continue in IVET. However, IVET begins after the end of compulsory education (at the age of 16) and, once completed, allows access to higher VET.

Spanish students show a clear preference for academic over vocational studies: only 33% of students who passed post-compulsory secondary education for the first time took vocational training, whilst the EU average stands at 46.3% (OECD 2019). This preference may be caused by the still existing stigmas and prejudices about VET, seen as a second-class education option aimed at those with poor educational performance (Marhuenda-Fluixà et al. 2015; Martínez-Morales and Marhuenda-Fluixá 2020; Merino-Pareja 2013; Planas-Coll, Merino-Pareja, and Carabaña-Morales 2015; Ryan and Lőrinc 2018).

Moreover, there is increasing concern regarding the high dropout rates in Intermediate VET (IVET), thus nearly half of all students dropping out without obtaining the credential (Cedefop 2016a; Martínez-Morales and Marhuenda-Fluixá 2020; Ministry of Education and Vocational Training 2019). Recent studies, developed in the Balearic Islands, underline that 22.5% of IVET students thought about dropping out during the first three months of training; 29.7% dropped out during the first year, and 43.9% dropped out after three years (Cerdà-Navarro, Salvà-Mut, and Comas-Forgas 2019). Furthermore, the gross graduation rate for IVET is 22.7%, sitting well below the corresponding rate for higher secondary education of 55.4% (Ministry of Education and Vocational Training 2019).

In spite of the strategic importance of VET in reducing ELET rates, there is a lack of studies focusing on analysing dropout at this stage of education (Cedefop 2016a; Cerdà-Navarro, Sureda-Negre, and Comas-Forgas 2017; Dore and Lüscher 2011; Echevarría-Samames and Martínez-Clares 2019; Elffers 2013; Elffers, Oort, and Karsten 2012; Grønborg 2013; Tanggaard 2013).

There is broad consensus among the research community on defining dropout as a complex and dynamic process of progressive educational disengagement that involves individual, social, family, cultural, socioeconomic, and institutional factors (Elffers 2012; Masdonati, Lamanra, and Jordan 2010; Rumberger 2011; Salvà-Mut, Oliver-Trobat, and Comas-Forgas 2014).

On this matter, various studies, both in the field of vocational training and in secondary education, confirm the enormous heterogeneity of early leavers group and the circumstances leading to dropout (Cedefop 2016a; Cerdà-Navarro, Salvà-Mut, and Comas-Forgas 2019; Fortin et al. 2006: Janosz et al. 2000). Moreover, various authors conclude that not all dropouts have a negative connotation as some of them can have a positive impact (Cerdà-Navarro, Salvà-Mut, and Comas-Forgas 2019).



# Reasons for dropping out in vocational education and training and factors influencing

Before starting the presentation of this section, it is necessary to underline that there is a great diversity and richness of vocational education and training systems in Europe. This diversity is given by factors such as the character of training (whether it is school-based or work-based), the specificity of programmes (broad field of study or occupations), and access to higher education and status (in terms of public opinion) (Cedefop 2020b) as well as the social, economic and labour market characteristics of each EU Member State.

However, in contrast with this heterogeneity, there is a certain consensus in the studies carried out in different European geographical contexts on the main factors influencing the reasons for dropping out of vocational education and training, which are described below.

# Individual and family background influences

The existence of a heterogeneous student profile in Spanish VET in terms of age can lead to differences in the process and reasons for dropping out. For example, older students may be more motivated and value the training more than younger students (Cerdà-Navarro, Salvà-Mut, and Comas-Forgas 2019; Elffers 2012, 2013), although at the same time, they may have more distant relationships with teachers and peers, as well as more difficulties in combining studies with work and/or family responsibilities (Elffers 2012; Elffers, Oort, and Karsten 2012; Salvà-Mut, Cerdà-Navarro, and Sureda-Negre 2019).

In terms of *gender*, research showed that men are more likely to dropout than women, although there could be differences in the reasons for dropping out. In turn, one should not overlook that dropping out due to family responsibilities often affects women more (Cedefop 2016a; Tanggaard 2006), and some studies mention early pregnancy and motherhood as a major reason for dropping out (Dore and Lüscher 2011; Elffers 2012; Portis 2013); these elements would corroborate the persistent presence of traditional gender roles, especially amongst women with lower levels of education and/or previous ELET experiences (lanelly and Duta 2018; Struffolino and Borgna 2020).

Socioeconomic status also tends to be lower amongst IVET students. Some studies suggest that students from families with lower qualifications place a lower value on education and would show lower confidence in their chances for academic success (Tarabini et al. 2019). In addition, a higher perception of financial problems may represent a huge emotional burden that would affect academic results and the reason for dropping out (Diamond 2007; Elffers 2012, 2013; Taş et al. 2013). In fact, the difficulties in adjusting to group expectations (particularly financial) could also motivate some young people to choose the job

market or vocational pathways that provide job opportunities more quickly (Denis and Groisy 2002; Diamond 2007; Dore and Lüscher 2011; Layte 2017; Martín-Criado 1996). In this instance, the desire to join the labour market may be higher amongst students with greater financial difficulties who, more than viewing the job market as a liberation like students with low performance, see employment as a necessity. For example, one should not overlook that fact that immigrant students are often from families with a lower socioeconomic standing (lower qualification levels, worse jobs and income, etc.) and, consequently, may have greater financial difficulties and drop out more due to the need for immediate employment than native-born students or those who come from families with a higher socioeconomic status (Aguilar et al. 2018; Colding 2006; Mivar-Busto 2017). In this sense, Cerdà-Navarro et al. (2020) identify statistically significant differences between native and immigrant IVET students. Hence, the percentage of native students with quite a few or many financial difficulties is 26.8%, while this percentage is 37.0% among immigrants. In turn, the percentage of unemployed parents is 13.6% for natives and 23.4% for immigrants.

# Educational experiences and school characteristics

Students who opt for vocational pathways tend to have poorer academic backgrounds (lower educational performance, more repetitions and expulsions). With regard to disciplinary problems, certain studies underscore that dropping out is a prolonged process that starts with an educational disengagement, and that early signs of possible dropouts would be bad behaviour, expulsions or repeated absences (Archambault et al. 2009; Fernández-Enquita, Mena-Martínez, and Riviére-Gómez 2010; Mena-Martínez, Fernández-Enquita, and Riviére-Gómez 2010).

Several research point to the influence of grade repetition on dropout (Elffers 2012, 2013; Puig 2015). For example, Cerdà-Navarro, Salvà-Mut, and Comas-Forgas 2019 reports statistically significant differences between IVET repeater and non-repeater students both in their intention to dropout and in the dropout rate. Among repeating students, the intention to dropout in the first year of the course is 25.7% and 16.6% in the case of non-repeating students. Moreover, 40.2% of repeating students eventually drop out, while this percentage is 21.2% for non-repeating students.

In this sense, prior schooling experiences impact the success of posttransition students, both directly and indirectly, manifesting in their attitudes, behaviour and performance in the new institutional setting (Elffers 2012, 2013). Some students with prior discipline problems may come to IVET with more advanced disengagement from education and thus drop out due to lack of motivation and interest in the course or to considering the education system geared to their needs (Cerdà-Navarro et al. 2020; Nielsen and Tanggaard 2015; Yi et al. 2015). These dropout reasons could be greater amongst male and/or immigrant students who tend to have more prior disciplinary issues (Cerdà-Navarro, Salvà-Mut, and Comas-Forgas 2019; Cerdà-Navarro et al. 2020).

Moreover, there are two elements that could lead to dropping out amongst students with low educational performance: firstly, the stigma of having failed and feeling less intelligent and capable (Cedefop 2016a; Nielsen 2016; Niittylahti, Annala, and Mäkinen 2019); and secondly, the possibility of joining the job market, which is often cited as one of the main reasons for dropping out of VET. Indeed, it is common for certain students with less-than-successful backgrounds to drop out when they reach the legal employment age, seeing it as a liberation and new opportunity (Cedefop. 2016b; Dore and Lüscher 2011; Fernández-Enquita, Mena-Martínez, and Riviere-Gómez 2010; Marín, Carmona, and Reche 2014; Petrongolo and San Segundo 2002; Serrano, Soler, and Hernández 2013). This reasoning for dropping out may be higher amongst repeat student, as well as amongst males and immigrants, since they tend to have a lower performance background from compulsory secondary education (Cedefop 2016a; Cerdà-Navarro et al. 2020; Fernández-Enguita, Mena-Martínez, and Riviere-Gómez 2010; OECD 2019; Ministry of Education and Vocational Training 2019; Schuller 2018).

Along these lines, the pathways' diversification at the end of compulsory schooling has been analysed by many studies as a source of reproduction for educational and social inequalities that define profiles inherent to students in VET (Calero-Martínez 2008; Cedefop 2016a; García and Merino 2009; García-Gràcia et al. 2013; García-Gràcia and Sánchez-Gelabert 2020; Tarabini and Ingram 2018). Thus, a higher proportion of students on vocational pathways tends to be male, immigrants, older, with a lower socioeconomic status and poorer academic background (Cedefop 2016a; Diamond 2007; Fernández-Enquita, Mena-Martínez, and Riviere-Gómez 2010; Merino-Pareja, Martínez-García, and Valls 2020; Stromback 2010).

In this sense, the entryways to IVET may act in two ways. Firstly, as a segregation mechanism favouring ongoing stigmas about VET (Martínez-Morales and Marhuenda-Fluixá 2020; Ryan and Lőrinc 2018). Secondly, this selection bias would lead to certain sociodemographic factors traditionally associated with dropping out at other education levels having a lower weight when predicting the dropout in IVET. For example, there is a lower percentage of students from families with a high socioeconomic standing in IVET (Merino-Pareja, Martínez-García, and Valls 2020) and those that are, may have a lower performance and more discipline problems (Cedefop 2016a; Cerdà-Navarro, Salvà-Mut, and Comas-Forgas 2019; Elffers 2012).

In turn, one of the reasons specifically linked to dropping out of IVET is a lack of satisfaction with the chosen training. With regard to the reasons for choosing studies, both expressive (I like it) and instrumental (professional or academic usefulness) tend to reduce dropout (Cerdà-Navarro, Sureda-García, and Salvà-Mut 2020; Fernández-Enguita, Mena-Martínez, and Riviere-Gómez 2010; Mena-

Martínez, Fernández-Enquita, and Riviére-Gómez 2010; Merino-Pareja, Martínez-García, and Valls 2020; Navarro and Soler 2014), whilst training for professions not selected as a first choice, or where there is no emotional or instrumental connection, tends to raise dropout (Cedefop 2016a; Diamond 2007; Elffers, Oort, and Karsten 2012; Nielsen and Tanggaard 2015). In this instance, younger students may drop out due to reasons related to a wrong professional choice arising from a lack of guidance and information on programmes and professions, as well as difficulties in adapting to the transition from secondary to vocational education (Cedefop. 2016b; Cerdà-Navarro, Sureda-Negre, and Comas-Forgas 2017; Elffers 2012).

### Labour market characteristics

The features of local labour markets and the available opportunities for young and/or unqualified workers are factors that may influence the dropout of VET (Cedefop 2016a; Fernández-Enguita, Mena-Martínez, and Riviere-Gómez 2010; Muñoz et al. 2009; Petrongolo and San Segundo 2002; Serrano, Soler, and Hernández 2013). In this sense, Spanish labour market, and particularly in tourist areas, has been characterised as being open to people with a low qualification level, acting as a pole of attraction for youth with low educational level and a lack of motivation to continue studying (Adame-Obrador and Salva-Mut 2010; Petrongolo and San Segundo 2002; Puig 2015). In this regard, another of the main reasons for dropping out of VET is to join the labour market or having already found paid employment (Cedefop 2016a; Dore and Lüscher 2011; Fernández-Enquita, Mena-Martínez, and Riviere-Gómez 2010; Serrano, Soler, and Hernández 2013; Taş et al. 2013) being identified by Spanish VET students as the main reason for dropping out (Cedefop 2016a).

In turn, if the labour market offers sub-optimal working conditions, with occupations (generally in the touristic sector) characterised by low pay, instability or long working hours, this may influence young people's motivation towards these VET studies either by dropping out or by changing to another training option which can offer them better working conditions in the future (Cedefop 2016a).

# **Objective** and hypothesis

Analysing the factors underlying dropout processes and reasons specifically in the Spanish IVET system is essential for educational intervention aimed at improving the VET system and adapting it to the specific needs of the diverse profile of students.

This article analyses the importance of reasons for dropping out of IVET in Spain, and specifically in the Balearic Islands, one of the regions with the highest incidence of ELET and with specific socio-economic characteristics such as an economy strongly based on tourism (Adame-Obrador and Salva-Mut 2010; Puig 2015; Salvà-Mut, Cerdà-Navarro, and Sureda-Negre 2019). This analysis mainly

pursues two aims: firstly, to identify the main reasons why students drop out at this educational level and, secondly, to pinpoint the level of influence from personal (sex, ethnicity, age), family (parents' level of education) and financial (perception of financial difficulties) sociodemographic characteristics, as well as students' academic background (expulsion and repetition) in the processes, reasons and justifications for dropping out.

One important and specific feature of IVET in Spain is that, since it is a postcompulsory education stage, there are student profiles with different ages and diverse prior educational pathways.<sup>2</sup> Thus, on the one hand, there are students with more or less linear pathways from compulsory secondary education and, on the other, youths and adults with previous non-linear pathways (ruptures and interruptions) who return to education for different reasons: either they are unemployed, have failed other courses or they want to make a career change. In these instances, students' age and prior educational pathways could generate differences in the processes and motivations leading to dropping out or for justifying it (Cedefop 2016a; Cerdà-Navarro, Salvà-Mut, and Comas-Forgas 2019; Masdonati, Lamanra, and Jordan 2010).

Dropping out should be analysed in the context of the inherent and specific characteristics for IVET in Spain, as well as in relation to the heterogeneous profile of students (Cedefop 2016a; Cerdà-Navarro, Salvà-Mut, and Comas-Forgas 2019; Merino-Pareja, Martínez-García, and Valls 2020). In this sense, the analysis undertaken is based on the initial hypothesis that the diversity of profiles amongst IVET students in Spain influences and generates differences in the processes and motivations that lead to dropping out or in students justifying their leaving.

More specifically, on the basis of the heterogeneity of the student's profiles and the research carried out on the reasons for dropping out of vocational training, we consider the following hypotheses:

- Personal variables such as age, gender and nationality will generate different reasons for dropping out of IVET.
- Family variables such as parents' level of education and economic difficulties will generate different reasons for dropping out of IVET.
- Educational variables, such as expulsions and repetitions throughout compulsory education, will generate different reasons for dropping out of IVET.

### Material and methods

### Data

The analysed data come from the Research & Development & Innovation project<sup>3</sup> 'Successful pathways and dropout rates in basic and intermediate vocational training'

(REF. EDU2013-42,854-R), a longitudinal study aimed at monitoring (over three years) the training and employment pathways amongst a representative set of students from the first year on IVET in Balearic Islands – a Spanish region with one of the highest ELET rates.

The grants are aimed both at fostering the generation and significant advancement of scientific knowledge and research of proven quality and at advancing the search for solutions to society's challenges.

### Instrument

The monitoring was carried out through three questionnaires filled in over three successive years. The first was performed between two and three months after the start of the first year and mainly aimed to measure students' attachment to their studies, collect sociodemographic information on students and contact details to be able to continue the monitoring process with the subsequent questionnaires. The second was run in the following year (when, theoretically, the students should have been starting their second year) and the third was filled in two years after starting the course (when, theoretically, the students should have finished the course).

### **Procedure**

The first questionnaire was self-administered with participants from classes at the 21 centres that took part in the study. The second was administered through two different procedures: those who had continued studying filled it out in classrooms at their centres, whilst those who had dropped out were interviewed over the phone. The third was filled in by all individuals over the phone. Finally, it should be stated that the study was approved by the research ethics committee at the University of the Balearic Islands and performed with the prior informed consent of the families of minor students.

# Sample and subsample

The initial study sample comprised 1,157 students, a representative sample of the total number of students who started in that year the first course of IVET in Majorca (3.204)., This represents a margin of error of ±2.3% considering p = g and a 95% confidence level. Of the 1,157 participants, 399 (34.5%) dropped out of their course without obtaining the corresponding qualification.

Of the 399 individuals who dropped out, 286 answered the questions regarding the reasons for dropping out on the second and/or third questionnaire, whilst the remaining 113 could not be contacted. One should take into account that longitudinal studies often have high sample attrition and, here, students who drop out are more difficult to locate and reluctant to respond. In terms of the sample characteristics (n = 286): 38.1% were female, 22.4% non-native and the average age was  $18.96 \pmod{= 17}$ ; median = 18; SD = 3.78); 74% repeated a year during compulsory secondary education and 33.5% were expelled; 49.2% of parents had, at the most, basic-level qualifications (ISCED 0-2), 25.6% intermediate-level qualifications (ISCED 3-4) and 25.2% higher-level qualifications (ISCED 5-8).

### Measurement and variables

## Dropped out without qualification (yes/no)

The second and third questionnaire included a filter question on their status with regard to IVET studies. One of the possible answers was 'I left without obtaining the corresponding qualification'. Those who selected this option had to respond to a question on 11 possible reasons for dropping out.

# Reasons for dropping out (important/not important)

The reasons for dropping out were defined on the basis of the Survey on Education-Training Transition and Labour Insertion carried out by the National Institute of Statistics (NIE 2005). This survey analysed dropouts in compulsory secondary education, and therefore we adapted some of these reasons to the characteristics of our study sample (Financial issues; I found a job; I wanted to do a different course; I was tired of studying; The course was hard; I got bad results; I didn't like it and I wanted to find a job). Furthermore, we included the variable 'Others', where respondents could add reasons that in their experience were important. Some of these reasons were included as response options in the second questionnaire administered (Health problems; I got expelled from the centre, Caring from family members).

As a result, the questionnaire offered 11 reasons for dropping out: 1) Financial issues; 2) Health problems; 3) Caring for family members; 4) I found a job; 5) I wanted to do a different course; 6) I was tired of studying; 7) The course was hard; 8) I got bad results; 9) I didn't like it; 10) I wanted to find a job; 11) I got expelled from the centre. For each of these reasons, the students had to provide the level of importance (Not at all important/Not important/Important/Very important). In order to aid analysis, the possible answers were put into two groups: Not important (including not at all important and not important) and Important (including important and very important). In this sense, it is also a methodological decision that allows both the reduction of missing cases and the simplification of the results and their interpretation.

# **Grouping variables**

In order to perform comparisons, seven grouping variables were used that came from the first questionnaire: a) Sex (Male/Female); b) Ethnicity (Native/ Foreigner); c) Age (15-17/18-19/+19); d) Highest educational level of parents (Basic/Intermediate or Higher); e) Perception of financial difficulties (None or Occasional/Some or A lot); f) Repeating a year (Repeater/Nonrepeater), and g) Expulsion (Expelled/Not expelled).

# Data analysis

Firstly, the importance placed on the 11 reasons for dropping out and the main reason for the entire sample were analysed. This analysis was performed via frequency tables for the corresponding variables.

Secondly, the differences in the importance placed on the 11 reasons for dropping out were analysed according to personal (sex, ethnicity, age), family (parents' educational level) and financial (perception of financial difficulties) sociodemographic variables, as well as academic background (expulsion and repetition). This analysis was performed via contingency tables where the chi-squares were calculated as a measure of association between variables and, finally, the typified residuals were also calculated as a measure of association between variable categories.

### Results

The results of the research are presented in three sub-sections, analysing the level of influence of personal socio-demographic variables (sex, ethnicity, age), family socio-demographic characteristics (parents' level of education) and financial (perception of financial difficulties), and the students' academic background (expulsion and repetition) on the reasons for dropping out.

# Reasons for dropping out by sociodemographic factors (sex, ethnicity and age)

Table 1 indicates the importance placed on the 11 reasons for dropping out of IVET studies by sex, ethnicity and age for the entire sample.

Table 1. Reasons for dropping out by sociodemographic factors (sex, ethnicity and age).

	مد ره مه وسط	g	SEX	350	.(265	ETHNICITY			AG	ш	
Reasons for dropping out		Male	Female	Total	Native	Foreign	Total	15–17	18–19	20	Total
4	Not Important	58.7% <sub>(a)</sub>	63.0% <sub>(a)</sub>	60.4%	59.5% <sub>(a)</sub>	63.1% <sub>(a)</sub>	60.4%	64.4% <sub>(a)</sub>	61.4% <sub>(a)</sub>	48.3%(a)	59.8%
I FOUND A JOB	Important Total	41.3% <sub>(a)</sub> 172	37.0% <sub>(a)</sub> 108	39.6% 280	40.5% <sub>(a)</sub> 215	36.9% <sub>(a)</sub> 65	39.6% 280	35.6% <sub>(a)</sub> 104	38.6% <sub>(a)</sub> 114	51.7 <sup>%</sup> (a) 58	40.2% 276
	Not Important	$57.6\%_{(a)}$	$66.4\%_{(a)}$	61.1%	$61.6\%_{(a)}$	59.4% <sub>(a)</sub>	61.1%	60.2% <sub>(a)</sub>	57.8% <sub>(a)</sub>	70.2% <sub>(a)</sub>	61.2%
I WANTED TO FIND A JOB	Important	42.4% <sub>(a)</sub>	33.6% <sub>(a)</sub>	38.9%	38.4% <sub>(a)</sub>	40.6% <sub>(a)</sub>	38.9%	39.8% <sub>(a)</sub>	42.2% <sub>(a)</sub>	29.8% <sub>(a)</sub>	38.8%
	Total	170	110	280	216	64	280	103	116	27	276
	Not Important	56.3% <sub>(a)</sub>	68.8% <sub>(b)*</sub>	61.1%	$61.9\%_{(a)}$	58.5% <sub>(a)</sub>	61.1%	55.2% <sub>(a)</sub>	$56.0\%_{(a)}$	82.8% <sub>(b)**</sub>	61.3%
BAD RESULIS	Important Total	43.7% <sub>(a)</sub> 174	31.2% <sub>(b)*</sub> 109	38.9% 283	38.1% <sub>(a)</sub> 218	41.5% <sub>(a)</sub> 65	38.9% 283	44.8% <sub>(a)</sub> 105	44.0% <sub>(a)</sub> 116	17.2%(b)** 58	38.7%
	Not Important	56.3% <sub>(a)</sub>	72.0% <sub>(b)**</sub>	62.3%	61.8% <sub>(a)</sub>	64.1% <sub>(a)</sub>	62.3%	48.1% <sub>(a)</sub>	68.6% <sub>(b)</sub>	78.2% <sub>(b)**</sub>	62.8%
DO A DIFFERENT COURSE	Important	43.7% <sub>(a)</sub>	28.0% <sub>(b)</sub> **	37.7%	$38.2\%_{(a)}$	$35.9\%_{(a)}$	37.7%	$51.9\%_{(a)}$	31.4% <sub>(b)</sub>	21.8% <sub>(b)**</sub>	37.2%
	Total	174	107	281	217	49	281	104	118	55	277
	Not Important	$76.6\%_{(a)}$	$74.5\%_{(a)}$	75.8%	$77.3\%_{(a)}$	$70.8\%_{(a)}$	75.8%	$71.2\%_{(a)}$	$76.5\%_{(a)}$	$81.0\%_{(a)}$	75.4%
IT WAS HARD	Important	$23.4\%_{(a)}$	$25.5\%_{(a)}$	24.2%	$22.7\%_{(a)}$	$29.2\%_{(a)}$	24.2%	$28.8\%_{(a)}$	$23.5\%_{(a)}$	$19.0\%_{(a)}$	24.6%
	Total	175	110	285	220	65	285	104	119	28	281
	Not Important	$74.9\%_{(a)}$	78.9% <sub>(a)</sub>	76.4%	$74.1\%_{(a)}$	$84.4\%_{(a)}$	76.4%	$66.0\%_{(a)}$	80.9% <sub>(b)</sub>	87.9% <sub>(b)*</sub>	76.8%
I DIDN'T LIKE IT	Important	$25.1\%_{(a)}$	$21.1\%_{(a)}$	23.6%	$25.9\%_{(a)}$	$15.6\%_{(a)}$	23.6%	$34.0\%_{(a)}$	19.1% <sub>(b)</sub>	12.1% <sub>(b)*</sub>	23.2%
	Total	171	109	280	216	64	280	103	115	58	276
	Not Important	$73.4\%_{(a)}$	85.5% <sub>(b)*</sub>	78.1%	$78.1\%_{(a)}$	$78.1\%_{(a)}$	78.1%	$75.7\%_{(a)}$	$73.7\%_{(a)}$	91.4% <sub>(b)*</sub>	78.1%
TIRED OF STUDYING	Important	$26.6\%_{(a)}$	14.5% <sub>(b)*</sub>	21.9%	$21.9\%_{(a)}$	$21.9\%_{(a)}$	21.9%	$24.3\%_{(a)}$	$26.3\%_{(a)}$	8.6% <sub>(b)*</sub>	21.9%
	Total	173	110	283	219	64	283	103	118	58	279
	Not Important	87.3% <sub>(a)</sub>	80.7% <sub>(a)</sub>	84.8%	87.2% <sub>(a)</sub>	76.6% <sub>(b)*</sub>	84.8%	$89.3\%_{(a)}$	$84.6\%_{(a)}$	$75.9\%_{(a)}$	84.5%
FINANCIAL ISSUES	Important	$12.7\%_{(a)}$	$19.3\%_{(a)}$	15.2%	$12.8\%_{(a)}$	23.4% <sub>(b)*</sub>	15.2%	$10.7\%_{(a)}$	$15.4\%_{(a)}$	$24.1\%_{(a)}$	15.5%
	Total	173	109	282	218	49	282	103	117	28	278
	Not Important	$91.8\%_{(a)}$	87.0% <sub>(a)</sub>	86.68	$90.7\%_{(a)}$	87.3% <sub>(a)</sub>	86.68	92.1% <sub>(a,b)</sub>	93.1% <sub>(a)</sub>	80.7% <sub>(b)*</sub>	90.1%
HEALTH PROBLEMS	Important	$8.2\%_{(a)}$	$13.0\%_{(a)}$	10.1%	$9.3\%_{(a)}$	$12.7\%_{(a)}$	10.1%	7.9% <sub>(a,b)</sub>	$6.9\%_{(a)}$	19.3% <sub>(b)*</sub>	%6.6
	Total	170	108	278	215	63	278	101	116	27	274
	Not Important	$95.8\%_{(a)}$	88.1% <sub>(b)*</sub>	92.8%	$92.5\%_{(a)}$	$93.7\%_{(a)}$	92.8%	$99.0\%_{(a)}$	93.0% <sub>(a,b)</sub>	81.0% <sub>(b)**</sub>	92.7%
CARING FOR FAMILY	Important	$4.2\%_{(a)}$	11.9% <sub>(b)*</sub>	7.2%	$7.5\%_{(a)}$	$6.3\%_{(a)}$	7.2%	$1.0\%_{(a)}$	$7.0\%_{(a,b)}$	19.0% <sub>(b)**</sub>	7.3%
	Total	168	109	277	214	63	277	100	115		273
	Not Important	$97.0\%_{(a)}$	$96.2\%_{(a)}$	%2'96	$96.7\%_{(a)}$	$96.8\%_{(a)}$	%2'96	$97.0\%_{(a)}$	$94.7\%_{(a)}$	100%	%9.96
I WAS EXPELLED	Important	3.0% <sub>(a)</sub>	$3.8\%_{(a)}$	3.3%	3.3% <sub>(a)</sub>	$3.2\%_{(a)}$	3.3%	$3.0\%_{(a)}$	$5.3\%_{(a)}$	-%0:0	3.4%
	lotal	100	001	7/7	503	60	7/7	99	CII	00	700

Note 1: The values in the same row and sub-table that do not share the same sub-index are significantly different in p < .05. \* = p < .05. \*\* = p < .01. Note 2: This category does not use comparisons as the column proportion is equal to zero or one.

In terms of the influence of sex on the different reasons for dropping out by order of importance, they are: 1) I found a job (39.6%); 2) I wanted to find a job (38.9%); 3) I got bad results (38.9%); 4) I wanted to do a different course (37.7%); 5) The course was hard (24.2%); 6) I didn't like the course (23.6%); 7) I was tired of studying (21.9%); 8) Financial issues (15.2%); 9) Health problems (10.1%); 10) Caring for family members (7.2%); 11) I got expelled from the centre (3.3%).

In terms of differences by sex, more women than men drop out due to 'Caring for family members' (11.9% v. 4.2%) (p = 0.015), whilst more men than women drop out due to 'I wanted to do a different course' (43.7% v. 28%) (p = 0.009), 'I was tired of studying' (26.6% v. 14.5%) (p = 0.017) and 'I got bad results' (43.7% v. 31.2%) (p = 0.036). The remaining reasons show no statistically significant differences.

Regarding the differences due to ethnicity more foreign than native students drop out (23.4% v. 12.8%) due to 'Financial issues' (p = 0.038). The remaining reasons show no statistically significant differences.

Regarding differences by age, the youngest students (15–17) drop out due to 'I wanted to do a different course' (51.9% v. 31.4% and 21.8%) (p = 0.000) and 'I didn't like the course' (34% v. 19.1% and 12.1%) (p = 0.003). Students aged over 19 drop out more than the rest due to 'Health problems' (19.3% v. 7.9% and 6.9%) (p = 0.026) and 'Caring for family members' (19% v. 1% and 7%) (p = 0.000). Nonetheless, fewer than the rest drop out due to 'I was tired of studying' (8.6% v. 24.3% and 26.3%) (p = 0.022) and 'I got bad results' (17.2% v. 44.8% and 44.0%) (p = 0.001). The chi-square could not be calculated for the 'I got expelled' reason as there were no instances amongst the over-19s. The remaining reasons show no statistically significant differences.

# Reasons for dropping out by socioeconomic factors (parents' educational level and financial difficulties)

In terms of the educational level of parents, no statistically significant differences are found in any of the analysed reasons for dropping out. (Table 2)

Regarding differences based on the perception of financial issues, significant differences are observed in dropping out due to 'Financial issues', which has a higher weight amongst students who report a higher perception of financial difficulties (23.8% v. 11%) (p = 0.005). The remaining reasons show no statistically significant differences.

Table 2. Reasons for dropping out by socioeconomic factors (parents' educational level and financial difficulties).

-		7	PARENTS' EDUCATIONAL LEVEL		FINAN	FINANCIAL DIFFICULTIES	
Reasons for dropping out		Basic	Intermediate or higher	Total	None or occasional	Some or a lot	Total
	Not Important	58.7% <sub>(a)</sub>	60.3% <sub>(a)</sub>	59.5%	56.5% <sub>(a)</sub>	64.4% <sub>(a)</sub>	59.4%
I FOUND A JOB	Important	$41.3\%_{(a)}$	39.7% <sub>(a)</sub>	40.5%	43.5% <sub>(a)</sub>	$35.6\%_{(a)}$	40.6%
	Total	126	126	252	170	101	271
	Not Important	$57.3\%_{(a)}$	64.8% <sub>(a)</sub>	61.1%	62.4% <sub>(a)</sub>	$59.4\%_{(a)}$	61.3%
I WANTED TO FIND A JOB	Important	$42.7\%_{(a)}$	35.2% <sub>(a)</sub>	38.9%	37.6% <sub>(a)</sub>	40.6% <sub>(a)</sub>	38.7%
	Total	124	128	252	170	101	271
	Not Important	$59.1\%_{(a)}$	66.4% <sub>(a)</sub>	62.7%	60.1% <sub>(a)</sub>	$63.4\%_{(a)}$	61.3%
BAD RESULTS	Important	$40.9\%_{(a)}$	33.6% <sub>(a)</sub>	37.3%	39.9% <sub>(a)</sub>	36.6% <sub>(a)</sub>	38.7%
	Total	127	128	255	173	101	274
	Not Important	$66.7\%_{(a)}$	56.9% <sub>(a)</sub>	61.7%	59.2% <sub>(a)</sub>	65.3% <sub>(a)</sub>	61.4%
DO A DIFFERENT COURSE	Important	$33.3\%_{(a)}$	43.1% <sub>(a)</sub>	38.3%	40.8% <sub>(a)</sub>	34.7% <sub>(a)</sub>	38.6%
	Total	123	130	253	174	86	272
	Not Important	$73.2\%_{(a)}$	82.3% <sub>(a)</sub>	77.8%	78.7% <sub>(a)</sub>	73.5% <sub>(a)</sub>	%8'92
IT WAS HARD	Important	$26.8\%_{(a)}$	17.7% <sub>(a)</sub>	22.2%	21.3% <sub>(a)</sub>	26.5% <sub>(a)</sub>	23.2%
	Total	127	130	257	174	102	276
	Not Important	$77.6\%_{(a)}$	73.2% <sub>(a)</sub>	75.4%	74.7% <sub>(a)</sub>	79.2% <sub>(a)</sub>	76.4%
I DIDN'T LIKE IT	Important	$22.4\%_{(a)}$	26.8% <sub>(a)</sub>	24.6%	25.3% <sub>(a)</sub>	20.8% <sub>(a)</sub>	23.6%
	Total	125	127	252	170	101	271
	Not Important	$77.0\%_{(a)}$	79.8% <sub>(a)</sub>	78.4%	79.1% <sub>(a)</sub>	77.5% <sub>(a)</sub>	78.5%
TIRED OF STUDYING	Important	$23.0\%_{(a)}$	20.2% <sub>(a)</sub>	21.6%	20.9% <sub>(a)</sub>	22.5% <sub>(a)</sub>	21.5%
	Total	126	129	255	172	102	274
	Not Important	$81.7\%_{(a)}$	88.3% <sub>(a)</sub>	85.0%	89.0% <sub>(a)</sub>	76.2% <sub>(b)**</sub>	84.2%
FINANCIAL ISSUES	Important	$18.3\%_{(a)}$	11.7% <sub>(a)</sub>	15.0%	11.0% <sub>(a)</sub>	23.8% <sub>(b)</sub> **	15.8%
	Total	126	128	254	172	101	273
	Not Important	$89.6\%_{(a)}$	93.6% <sub>(a)</sub>	91.6%	91.1% <sub>(a)</sub>	88.0% <sub>(a)</sub>	%0:06
HEALTH PROBLEMS	Important	$10.4\%_{(a)}$	6.4% <sub>(a)</sub>	8.4%	8.9% <sub>(a)</sub>	12.0% <sub>(a)</sub>	10.0%
	Total	125	125	250	169	100	569
	Not Important	$94.3\%_{(a)}$	91.3% <sub>(a)</sub>	92.8%	94.0% <sub>(a)</sub>	90.1% <sub>(a)</sub>	92.5%
CARING FOR FAMILY	Important	$5.7\%_{(a)}$	8.7% <sub>(a)</sub>	7.2%	$6.0\%_{(a)}$	9.9% <sub>(a)</sub>	7.5%
	Total	123	126	249	167	101	268
	Not Important	$97.5\%_{(a)}$	95.1% <sub>(a)</sub>	%8.96	97.0% <sub>(a)</sub>	97.0% <sub>(a)</sub>	62.0%
I WAS EXPELLED	Important	$2.5\%_{(a)}$	4.9% <sub>(a)</sub>	3.7%	$3.0\%_{(a)}$	$3.0\%_{(a)}$	3.0%
	Total	121	123	244	164	66	263

Note: The values in the same row and sub-table that do not share the same sub-index are significantly different in p < .05. \* = p < .05. \*\* = p < .01.



# Reasons for dropping out by academic background (expulsion and repeating)

Regarding differences based on expulsion, students who have not been expelled (27.4%) show a higher drop-out rate due to 'The course was hard' than those who have been expelled (27.4% v. 16%) (p = 0.033). The remaining reasons show no statistically significant differences. (Table 3)

Regarding differences due to repetition, more repeat students than nonrepeat students drop out due to 'I found a job' (44.1% v. 27.4%) (p = 0.0130). In turn, more non-repeat students than repeat students drop out due to 'I didn't like it' (33.3% v. 19.7%) (p = 0.019). The remaining reasons show no statistically significant differences.

Table 3. Reasons for dropping out by academic background (expulsion and repeating).

		•	EXPULSION			REPEATING	
Reasons for dropping out		Expelled	Non- Expelled	Total	Repeater	Non- Repeater	Total
	Not Important	58.9% <sub>(a)</sub>	61.1% <sub>(a)</sub>	60.4%	55.9% <sub>(a)</sub>	72.6% <sub>(b)*</sub>	60.4%
I FOUND A JOB	Important Total	41.1% <sub>(a)</sub> 90	38.9% <sub>(a)</sub> 185	39.6% 275	44.1% <sub>(a)</sub> 202	27.4% <sub>(b)*</sub>	39.6% 275
	Not Important	54.3% <sub>(a)</sub>	64.5% <sub>(a)</sub>	61.1%	58.1% <sub>(a)</sub>	69.4% <sub>(a)</sub>	61.1%
I WANTED TO FIND A JOB	Important	45.7% <sub>(a)</sub>	35.5% <sub>(a)</sub>	38.9%	41.9% <sub>(a)</sub>	30.6% <sub>(a)</sub>	38.9%
	Total	92	183	275	203	72	275
	Not Important	67.7% <sub>(a)</sub>	57.8% <sub>(a)</sub>	61.2%	62.4% <sub>(a)</sub>	56.2% <sub>(a)</sub>	60.8%
BAD RESULTS	Important Total	32.3% <sub>(a)</sub> 93	42.2% <sub>(a)</sub> 185	38.8% 278	37.6% <sub>(a)</sub> 205	43.8% <sub>(a)</sub> 73	39.2% 278
	Not Important	62.6% <sub>(a)</sub>	61.6% <sub>(a)</sub>	62.0%	64.5% <sub>(a)</sub>	57.5% <sub>(a)</sub>	62.7%
DO A DIFFERENT COURSE	Important	37.4% <sub>(a)</sub>	$38.4\%_{(a)}$	38.0%	35.5% <sub>(a)</sub>	42.5% <sub>(a)</sub>	37.3%
	Total	91	185	276	203	73	276
	Not Important	84.0% <sub>(a)</sub>	72.6% <sub>(b)*</sub>	76.4%	78.3% <sub>(a)</sub>	68.5% <sub>(a)</sub>	75.7%
IT WAS HARD	Important Total	16.0% <sub>(a)</sub> 94	27.4% <sub>(b)*</sub> 186	23.6% 280	21.7% <sub>(a)</sub> 207	31.5% <sub>(a)</sub> 73	24.3% 280
	Not Important	77.2% <sub>(a)</sub>	76.0% <sub>(a)</sub>	76.4%	80.3% <sub>(a)</sub>	66.7% <sub>(b)*</sub>	76.7%
I DIDN'T LIKE IT	Important Total	22.8% <sub>(a)</sub> 92	24.0% <sub>(a)</sub> 183	23.6% 275	19.7% <sub>(a)</sub> 203	33.3% <sub>(b)*</sub> 72	23.3% 275
	Not Important	77.4% <sub>(a)</sub>	78.9% <sub>(a)</sub>	78.4%	79.1% <sub>(a)</sub>	76.4% <sub>(a)</sub>	78.4%
TIRED OF STUDYING	Important	22.6% <sub>(a)</sub>	21.1% <sub>(a)</sub>	21.6%	20.9% <sub>(a)</sub>	23.6% <sub>(a)</sub>	21.6%
	Total	93	185	278	206	72	278
	Not Important	83.7% <sub>(a)</sub>	85.9% <sub>(a)</sub>	85.2%	83.4% <sub>(a)</sub>	87.5% <sub>(a)</sub>	84.5%
FINANCIAL ISSUES	Important	16.3% <sub>(a)</sub>	14.1% <sub>(a)</sub>	14.8%	16.6% <sub>(a)</sub>	12.5% <sub>(a)</sub>	15.5%
	Total	92	185	277	205	72	277
	Not Important	91.1% <sub>(a)</sub>	89.6% <sub>(a)</sub>	90.1%	(4)	90.3% <sub>(a)</sub>	90.1%
HEALTH PROBLEMS	Important	8.9% <sub>(a)</sub>	10.4% <sub>(a)</sub>	9.9%	10.0% <sub>(a)</sub>	9.7% <sub>(a)</sub>	9.9%

(Continued)

Table 3. (Continued).

			EXPULSION			REPEATING	
Reasons for dropping		Expelled	Non- Expelled	Total	Repeater	Non- Repeater	Total
- Out			•		•	•	
	Total	90	183	273	201	72	273
	Not	91.1% <sub>(a)</sub>	94.0% <sub>(a)</sub>	93.0%	91.5% <sub>(a)</sub>	97.2% <sub>(a)</sub>	93.0%
	Important						
CARING FOR FAMILY	Important	$8.9\%_{(a)}$	6.0% <sub>(a)</sub>	7.0%	$8.5\%_{(a)}$	2.8% <sub>(a)</sub>	7.0%
	Total	90	182	272	200	72	272
	Not Important	97.7% <sub>(a)</sub>	96.1% <sub>(a)</sub>	96.6%	97.0% <sub>(a)</sub>	95.7% <sub>(a)</sub>	96.6%
I WAS EXPELLED	Important	2.3% <sub>(a)</sub>	3.9% <sub>(a)</sub>	3.4%	3.0% <sub>(a)</sub>	4.3% <sub>(a)</sub>	3.4%
	Total	88	179	267	197	70	267

Note: The values in the same row and sub-table that do not share the same sub-index are significantly different in p < .05. \* = p < .05. \*\* = p < .01.

### Discussion

Firstly, and in line with prior literature, the presented results show that the most common reasons or justification for dropping out of IVET are having found employment or seeking employment, obtaining poor results and wanting to do a different course.

Secondly, the obtained results highlight differences in the reasons for dropping out depending on different student characteristics such as sex, ethnicity, age, the perception of financial difficulties and academic background (expulsion and repetition).

By sex, the results show that women drop out more due to caring for family members (Cedefop 2016a; Tanggaard 2006). These results underline the arguments from prior literature that highlight persistent traditional gender roles and their impact on educational and career pathways for women (lanelly and Duta 2018; Struffolino and Borgna 2020). In turn, it should be stated that this is a lowpercentage reason, both globally (only 7.2%) and for women (11.9%), within the range of reasons analysed for dropping out.

Males drop out more due to wanting to do a different course, being tired of studying or having obtained bad results. On the one hand, the results point to an unsuitable choice of course not meeting prior expectations due to lack of professional guidance (Cedefop 2016a; Cerdà-Navarro, Sureda-Negre, and Comas-Forgas 2017; Elffers 2012). On the other, men tend to have poorer academic backgrounds and performance than women (OECD 2019; Ministry of Education and Vocational Training 2019), which leads to them dropping out more due to 'being tired of studying' and 'obtaining bad results' than women.

In terms of the influence of age, the observed results are particularly interesting and should be interpreted bearing in mind that one of the specific feature of IVET in Spain is the co-existence of two student profiles: those who come from compulsory secondary education and those who are older and show previously

non-linear education pathways (repeaters or early school leavers) or are returning to training due to different reasons, including unemployment or a need for change. These two profiles present differences not only in their pathways but also in the reasons and constraints that have led to their current situation (Cedefop 2016a; Cerdà-Navarro, Salvà-Mut, and Comas-Forgas 2019.; García-Gràcia and Sánchez-Gelabert 2020; Masdonati, Lamanra, and Jordan 2010). In this sense, younger students drop out more due to a desire to do a different course and not liking the course. These results point to problems of dissatisfaction with the chosen training arising from a greater lack of guidance on available programmes and professions amongst younger students (Cedefop. 2016b; Elffers 2012) and the need to develop professional guidance and counselling programmes aimed at enhancing the vocational identity of these students (Keizer et al. 2020).

In turn, older students drop out more due to health issues and to look after family members, whilst having the lowest dropout rate due to being tired of studying or having got poor academic performance. These results not only suggest that older students would have clearer professional preferences but also that many of them may return to training with greater motivation; nevertheless, they would also have family responsibilities that could lead to them dropping out (Cerdà-Navarro, Salvà-Mut, and Comas-Forgas 2019; Elffers 2012, 2013; Elffers, Oort, and Karsten 2012).

Financial issues are the most important reason for dropping out amongst immigrant students and for those reporting greater financial difficulties. In this sense, immigrant students tend to have parents with a lower socioeconomic status (level of education, income, etc.) and, consequently, may have greater financial difficulties than native students (Aguilar et al. 2018; Cerdà-Navarro et al. 2020; Colding 2006; Miyar-Busto 2017). Finding employment may be more of a need for this cohort than any pretext for dropping out.

In terms of academic background, repeat students drop out more due to having found employment. These results suggest that students with poorer academic performance could see the job market as an opportunity or liberation offering them the chance to start afresh in a different setting (Cedefop. 2016b; Dore and Lüscher 2011; Fernández-Enguita, Mena-Martínez, and Riviere-Gómez 2010).

In turn, non-repeat students drop out more due to not liking the course, suggesting a poor professional choice and lack of guidance or that the course does not meet their prior expectations (Cedefop 2016a; Cerdà-Navarro, Sureda-Negre, and Comas-Forgas 2017; Elffers 2012).

In terms of bad behaviour, students who have not been expelled drop out more due to problems with the course. In this sense, the results point to there possibly being students who, although not having any discipline problems, could show lower academic performance which makes the transition process to VET more difficult (Cedefop 2016a; Sureda-Negre, and Comas-Forgas 2017;



Elffers 2012). In turn, they could also be dissatisfied students due to a course choice that does not match their profile; this points to problems from a lack of guidance and information regarding professions and programmes (Cedefop 2016a; Sureda-Negre, and Comas-Forgas 2017).

# Implications for practice

This article has argued that one of the characteristics of IVET in Spain is the heterogeneity of students. Moreover, the results have shown differences in the reasons for dropping out according to socio-demographic characteristics.

In this sense, from the practical implications perspective, the results obtained suggest that educational interventions aimed at reducing drop-out rates in IVET should take into account the profiles heterogeneity of students in this educational stage.

As this article has shown, those students with a higher number of grade repetitions and/or immigrant drop out more because they have found a job or for economic reasons. In accordance with these implications and those from previous research, important changes could be suggested in the Spanish educational system, both in compulsory secondary education and in VET. Related to compulsory secondary education, a more comprehensive education system adapted to the students' diversity must be established, in order to avoid progressive processes of school disengagement. On this point, the contributions of studies on student engagement should be taken into account, fostering a positive teacherstudent relationship based on proximity, support, autonomy and developing a greater confidence in students' abilities with negative previous educational experiences (Elffers, Oort, and Karsten 2012; Cerdà -Navarro, Salvà-Mut, and Comas-Forgas 2019; Van Houtte and Van Maele 2012). Teaching methods must also be adapted in order to provide more practical learning experiences geared to the needs and interests of learners (Elffers 2013; Fredricks, Blumenfeld, and Paris 2004).

The promotion of a more inclusive and comprehensive education would also reduce the impact of diversification pathways at the end of compulsory secondary education on the reproduction of educational, economic and social disadvantages.

In addition, younger students, and especially males, drop out more due to a desire to do a different course or not liking the course. This result points to the need to develop educational and vocational guidance processes from an early age in order to support students in their academic and professional pathways construction (Keizer et al. 2020). Furthermore, this process must be combined with the development of a wide range of VET courses adapted to the specific needs of the labour market.

The results obtained in this study also conclude that women and older students drop out of school to a greater extent for reasons related to caring for family members, which points to the need for greater development of equality and work-life balance policies that make possible to combine studies, family and, in some cases, work.

Finally, the specific Spanish contextual factors must be taken into consideration, and therefore it is essential to develop education, social and labour policies that promote the interaction and interrelation between the education system and the labour market, as well as the reduction of precariousness and to ensure the balance between training, work and family responsibilities from a global approach.

### Limitations and future research

The lack of empirical information and research on IVET in Spain adds a certain importance and relevance to the results in this article. Nevertheless, the research has limitations that should be borne in mind both when interpreting the results obtained and for undertaking future research.

One of the limitations of the article is the sample size and attrition rate. This problem is common in longitudinal studies that tend to see high sample attrition. Along these lines, of the 399 students who abandoned the study, only 286 provided responses, whilst 113 (28.3%) left during monitoring as they did not want to answer or could not be located outside the training centre. In this regard, one should take into account that it is precisely these individuals who dropped out that show the highest number of problems when it comes to maintaining the sample size during monitoring, since they are the most reluctant to speak about experiences that did not go well.

In turn, the analysis of the reasons why students drop out of IVET is an essential strategic issue in order to reduce drop-out rates. Hence, future research on the topic needs to broaden the analysed drop-out reasons. For example, qualitative analysis carried out during fieldwork points to the possibility of including future reasons for dropping out associated with bad relationships or conflicts with both teachers and peers, as well as problems arising from the difficulty in combining school schedules with employment or family responsibilities.

The article states that the co-existence of different student profiles in IVET creates differences in the processes, reasons and justifications for dropping out. However, discerning between an actual factor or reason for dropping out and verbal justifications of it offered by individuals themselves is a complicated task to achieve with a quantitative approach. Often, there are sequences of reasons (chains of causes) that let apprentices to drop out from VET, or there are clusters of reasons. Further, the simple addition of reasons does not explain the phenomenon and it must be taken into account that reasons might be interrelated. Despite this limitation, the analysis carried out here seem to be pertinent and

useful for future researches. In this sense, it is required that future researches analyse this question through qualitative methods. This should enable us to observe phenomena and processes which are difficult to uncover through a questionnaire. In this sense, qualitative methodology will allow for a better understanding of how students construct their discourses and justifications for dropping out (Becker 2008; Martín-Criado 2014).

Finally, and due to the strong implications of the results of this study on the configuration of current Spanish vocational education and training system, future research should include the main political actors and stakeholders with the aim of developing a strategy to improve the vocational training system in order to achieve the objectives and recommendations set by the European bodies (Cedefop 2020b).

# **Notes**

- 1. The International Standard Classification of Education adopted by UNESCO (2012) as a standard framework used to categorise and report cross-nationally comparable education statistics (ISCED-2012). The different levels are: ISCED 0 (Early Childhood Education); ISCED 1 (Primary Education), ISCED 2 (Lower Secondary Education), ISCED 3 (Upper Secondary Education), ISCED 4 (Post-secondary non-tertiary education); ISCED 5 (Short cycle tertiary education): ISCED 6 (Bachelor); ISCED 7 (Master) and ISCED 8 (Doctoral).
- 2. According to the Ministry of Education and Vocational Training (2019), 6.3% of IVET students in the 2017/2018 academic year were 16 or under, 16.6% were 17, 19.8% were 18, 14.9% were 19 and 40.4% were 20 or older.
- 3. The R + D + i projects respond to a line of financing from the Ministry of Economy and Competitiveness of the Spanish Government, the Spanish National Research Council and the European Regional Development Fund aimed both at fostering the generation and significant advancement of scientific knowledge and research of proven quality and at advancing the search for solutions to society's challenges.
- 4. The 80% of Balearic Islands' population lives in the Island of Majorca (Balearic Islands Statistics Institute, 2019).

### Disclosure statement

No potential conflict of interest was reported by the author(s).

# **Funding**

The data used in this article come from the R&D project 'Successful pathways and dropout rates in basic and intermediate vocational training' (REF. EDU2013-42854-R) funded by the Ministry of Economy and Competitiveness, the Spanish National Research Council and the European Regional Development Fund.

### ORCID



Elena Quintana-Murci (1) http://orcid.org/0000-0002-6533-6280 Francesca Salvà-Mut (1) http://orcid.org/0000-0001-8517-0014

### References

- Adame-Obrador, T., and F. Salva-Mut. 2010. "Abandono escolar prematuro y transición a la vida activa en una economía turística: El caso de Baleares." *Revista de Educación* 351: 185–201.
- Aguilar, M.I., H. Corrales-Herrero, B. Díaz, D. García-Crespo, and B. Rodríguez-Prado. 2018. "Time to First Significant Job for Vocational Graduates in Spain." *Journal of Youth Studies* 21 (2): 235–252. doi:10.1080/13676261.2017.1363876.
- Archambault, I., M. Janosz, J. Morizot, and L. Pagani. 2009. "Adolescent Behavioral, Affective, and Cognitive Engagement in School: Relationship to Dropout." *Journal of School Health* 79 (9): 408–415. doi:10.1111/j.1746-1561.2009.00428.x.
- Balearic Islands Statistical Institute. 2019. *Population Statistics*. [online] Available at: ht ps//ibestat.caib.es/ibestat/estadistiques/407f5ffd-c47c-4ae7-bb9e-665195fed063/dfbed614-c629-40f0-9936-60d416069a2e/es/pad\_res01\_19.px% [Accessed 20 June 2020].
- Becker, H.S. 2008. *Tricks of the Trade: How to Think about Your Research while You're Doing It.* Chicago: University of Chicago press.
- Calero-Martínez, J. 2008. "Problemas en el acceso a la educación postobligatoria en España." Revista de la Asociación de Sociología de la Educación (RASE) 1 (1): 49–61.
- Cedefop. 2016a. *Leaving Education Early: Putting Vocational Education and Training Centre Stage. Volume I: Investigating Causes and Extent.* Luxembourg: Publications Office of the European Union. doi:10.2801/893397.
- Cedefop. 2016b. *Leaving Education Early: Putting Vocational Education and Training Centre Stage. Volume II: Evaluating Policy Impact.* Luxembourg: Publications Office of the European Union. doi:10.2801/967263.
- Cedefop. 2020a. *On the Way to 2020: Data for Vocational Education and Training Policies. Indicator Overviews: 2019 Update.* Luxembourg: Publications Office of the European Union. doi:10.2801/62708.
- Cedefop. 2020b. Vocational Education and Training in Europe, 1995-2035: Scenarios for European Vocational Education and Training in the 21st Century. No 114. Luxembourg: Publications Office of the European Union. Cedefop reference series. http://data.europa.eu/doi/10.2801/794471
- Cerdà-Navarro, A., F. Salvà-Mut, and R. Comas-Forgas. 2019. "A Typology of Students in Intermediate Vocational Education and Training Programmes Based on Student Engagement Factors, Sociodemographic Characteristics and Intentions of Dropping Out." European Journal of Education 54 (4): 635–650. doi:10.1111/ejed.12361.
- Cerdà-Navarro, A., F. Salvà-Mut, R. Comas-Forgas, and M. Morey-López. 2020. "Natives and Immigrants Enrolled in Spanish Intermediate Vocational Education and Training: A Comparative Study." *Research in Post-compulsory Education* 25 (3): 295–317. doi:10.1080/13596748.2020.1802942.
- Cerdà-Navarro, A., I. Sureda-García, and F. Salvà-Mut. 2020. "Intención de abandono y abandono durante el primer curso de formación profesional de grado medio: Un análisis tomando como referencia el concepto de implicación del estudiante (student engagement)." Estudios sobre Educación 39: 33–57. doi:10.15581/004.39.33-57.
- Cerdà-Navarro, A., J. Sureda-Negre, and R. Comas-Forgas. 2017. "Recommendations for Confronting Vocational Education Dropout: A Literature Review." *Empirical Research in Vocational Education & Training* 9 (1): 17. doi:10.1186/s40461-017-0061-4.



- Colding, B. 2006. "Ethnicity, Gender and Vocational Education in Denmark." International Journal of Manpower 27 (4): 342-357. doi:10.1108/01437720610679205.
- Denis, V., and L. Groisy. 2002. "Les abandons en première année de formations professionnelles dans la région Centre." Education Et Formations 62: 122-125.
- Diamond, M. 2007. Vocational students' engagement and career objectives: Assessment of engagement processes in new vocational students. PhD diss., University of Pittsburgh.
- Dore, R., and A. Lüscher. 2011. "Persistence and Dropout in the Vocational Education High School in Minas Gerais." Cadernos de Pesquisa 41 (144): 770-789, doi:10.1590/S0100-15742011000300007.
- Echevarría-Samames, B., and P. Martínez-Clares. 2019. Diagnóstico de la Investigación sobre la Formación Profesional Inicial en España (2005-2017). Madrid: Fundación Bankia por la Formación Dual.
- Elffers, L. 2012. "One Foot Out the School Door? Interpreting the Risk for Dropout upon the Transition to Post-secondary Vocational Education." British Journal of Sociology of Education 33 (1): 41-61. doi:10.1080/01425692.2012.632866.
- Elffers, L. 2013. "Staying on Track: Behavioral Engagement of At-risk and Non-at-risk Students in Post-secondary Vocational Education." European Journal of Psychology of Education 28 (2): 545-562. doi:10.1007/s10212-012-0128-3.
- Elffers, L., F.J. Oort, and S. Karsten. 2012. "Making the Connection: The Role of Social and Academic School Experiences in Students' Emotional Engagement with School in Postsecondary Vocational Education." Learning and Individual Differences 22 (2): 242-250. doi:10.1016/j.lindif.2011.08.005.
- EUROSTAT. 2019a. Database. Education and Training Statistics at a regional level. [online] Available at: http://ec.europa.eu/eurostat/data/database [Accessed 16 July 2019].
- EUROSTAT. 2019b. Database. Youth unemployment. [online] Available at: http://ec.europa.eu/ eurostat/data/database [Accessed 16 July 2019].
- Fernández-Enquita, M., L. Mena-Martínez, and J. Riviere-Gómez. 2010. Fracaso y abandono escolar en España. Barcelona: Fundación "La Caixa".
- Fortin, L., D. Marcotte, P. Potvin, E. Royer, and J. Joly. 2006. "Typology of Students at Risk of Dropping Out of School: Description by Personal, Family, and School Factors." European Journal of Psychology of Education 21: 363-383. doi:10.1007/BF03173508.
- Fredricks, J.A., P.C. Blumenfeld, and A.H. Paris. 2004. "School Engagement: Potential of the Concept, State of the Evidence." Review of Educational Research 74 (1): 59–109. doi:10.3102/ 00346543074001059.
- García-Gràcia, M., J. Casal- Bataller, R. Merino- Pareja, and A. Sánchez-Gelabert. 2013. "Itinerarios de abandono escolar y transiciones tras la Educación Secundaria Obligatoria." Revista de Educación 361: 65-94.
- García-Gràcia, M., and A. Sánchez-Gelabert. 2020. "La heterogeneidad del abandono educativo en las transiciones posobligatorias. Itinerarios y subjetividad de la experiencia escolar." Papers 105 (2): 235-257. doi:10.5565/rev/papers.2775.
- García, M., and R. Merino. 2009. "Las transiciones de los adolescentes después de la escuela obligatoria. Cambios sociales y respuestas socioeducativas en el territorio." Revista de Educación Social 42: 47-60.
- Grønborg, L. 2013. "Scaring the Students Away? Institutional Selection through Assessment Practices in the Danish Vocational and Educational Training System." Journal of Vocational Education & Training 65 (4): 507-524. doi:10.1080/13636820.2013.850441.
- lanelly, C., and A. Duta. 2018. "Inequalities in School Leavers' Labour Market Outcomes: Do School Subject Choices Matter?" Oxford Review of Education 44 (1): 56-74. doi:10.1080/ 03054985.2018.1409970.



- Janosz, M., M. Le Blanc, B. Boulerice, and R.E. Tremblay. 2000. "Predicting Different Types of School Dropouts: A Typological Approach on Two Longitudinal Samples." *Journal of Educational Psychology* 92: 171–190. doi:10.1037/0022-0663.92.1.171.
- Keizer, R., W. Admiraal, R. Van der Rijst, and E. Van Schooten. 2020. "Vocational Identity of At-risk Emerging Adults and Its Relationship with Individual Characteristics." *International Journal for Educational and Vocational Guidance* 20 (2): 375–410. doi:10.1007/s10775-019-09409-z.
- Layte, R. 2017. "Why Do Working-class Kids Do Worse in School? an Empirical Test of Two Theories of Educational Disadvantage." *European Sociological Review* 33: 489–503. doi:10.1093/esr/jcx054.
- Marhuenda-Fluixá, F., ed. 2019. *The School-Based Vocational Education and Training System in Spain: Achievements and Controversies*. Vol. 32 Singapore: Springer. doi:10.1007/978-981-13-8475-2.
- Marhuenda-Fluixà, F., F. Salvà-Mut, A. Navas-Saurín, and M. Abiétar-López. 2015. "Twenty Years of Basic Vocational Education Provision in Spain: Changes and Trends." *International Journal for Research in Vocational Education and Training (IRJVET)* 2 (2): 137–151. doi:10.13152/JJRVET.2.2.8.
- Marín, J.A.M., M.G. Carmona, and J.M.S. Reche. 2014. "Reflexión y análisis sobre los Programas de Cualificación Profesional Inicial como medida de inclusión social y educativa en Andalucía (España)." REICE: Revista Electrónica Iberoamericana sobre Calidad, Eficacia y Cambio en Educación 12 (1): 83–102.
- Martín-Criado, E. 1996. "Jóvenes de clase obrera y formación profesional: Racionalidades prácticas y estrategias." *Revista de educación* 311: 235–252.
- Martín-Criado, E. 2014. "Mentiras, inconsistencias y ambivalencias. Teoría de la acción y análisis de discurso." *Revista Internacional de Sociología* 72 (1): 115–138. doi:10.3989/ ris.2012.07.24.
- Martínez-Morales, I., and F. Marhuenda-Fluixá. 2020. "Vocational Education and Training in Spain: Steady Improvement and Increasing Value." *Journal of Vocational Education & Training* 72 (2): 209–227. doi:10.1080/13636820.2020.1729840.
- Masdonati, J., N. Lamanra, and M. Jordan. 2010. "Vocational Education and Training Attrition and the School-to-work Transition." *Education and Training* 52 (5): 404–414. doi:10.1108/00400911011058343.
- Mena-Martínez, L., M. Fernández-Enguita, and J. Riviére-Gómez. 2010. "Desenganchados de la educación: Procesos, experiencias, motivaciones y estrategias del abandono y del fracaso escolar". *Revista de Educación número extraordinario*: 119–145. http://www.revistaeducacion.educacion.es/re2010/re2010\_05.pdf
- Merino-Pareja, R. 2013. "Las sucesivas reformas de la formación profesional en España o la paradoja entre integración y segregación escolar." *Archivos Analíticos de Políticas Educativas* 21 (66): 1–18. doi:10.14507/epaa.v21n66.2013.
- Merino-Pareja, R., J.S. Martínez-García, and O. Valls. 2020. "Efectos secundarios y motivaciones de las personas jóvenes para escoger Formación Profesional." *Papers* 105 (2): 259–277. doi:10.5565/rev/papers.2776.
- Ministry of Education and Vocational Training. 2019. Sistema estatal de indicadores de la educación 2019. Madrid: Secretaría General Técnica. https://www.educacionyfp.gob.es/inee/indicadores/sistema-estatal/edicion-2019.html
- Miyar-Busto, M. 2017. "La dedicación a los estudios de los jóvenes de origen inmigrante en España en la Gran Recesión." *Revista Española de Investigaciones Sociológicas* 157: 123–140. doi:10.5477/cis/reis.157.123.



- Muñoz, R., J. Antón, F. Braña, and E. Fernández. 2009. "Abandono escolar y mercado de trabajo en España." Informes y Estudios Empleo 40. https://works.bepress.com/janton/29/ download
- National Institute of Statistics [NIE]. 2005. Survey on Education-Training Transition and Labour Insertion. (ETEFIL). https://bit.ly/37IP7C9
- National Institute of Statistics [NIE]. 2019. Labour Force Survey. https://bit.ly/3rTvd9v
- National Institute of Statistics [NIE]. 2020. Survey on Education-Training transition and Labour Insertion. 2019. https://bit.ly/37aUe7Z
- Navarro, P., and I. Soler. 2014. "Las motivaciones de la elección de la carrera por los estudiantes universitarios." Revista de la Asociación de Sociología de la Educación 7 (1): 61-81. https://bit.ly/2VAj6zo
- Nielsen, K. 2016. "Engagement, Conduct of Life and Dropouts in the Danish Vocational Education and Training (VET) System." Journal of Vocational Education & Training 68 (2): 198-213. doi:10.1080/13636820.2015.1133694.
- Nielsen, K., and L. Tanggaard. 2015. "Dropping Out and a Crisis of Trust." Nordic Psychology 67 (2): 154-167. doi:10.1080/19012276.2015.1028763.
- Niittylahti, S., J. Annala, and M. Mäkinen. 2019. "Student Engagement at the Beginning of Vocational Studies." Nordic Journal of Vocational Education & Training 9 (1): 21-42. doi:10.3384/njvet.2242-458X.199121.
- OECD. 2019. Education at a Glance 2019: OECD Indicators. Paris: OECD Publishing.
- Petrongolo, B., and M.J. San Segundo. 2002. "Staying-on at School at 16: The Impact of Labor Market Conditions in Spain." Economics of Education Review 21 (353): 353–365. doi:10.1016/ S0272-7757(01)00019-X.
- Planas-Coll, J., R. Merino-Pareja, and J. Carabaña-Morales. 2015. "La formación profesional." In España 2015: Situación social, edited by C. Torres-Alberó, 539-546, Madrid: Centro de Investigaciones Sociológicas.
- Portis, D.L. 2013. A historical case study of dropout recovery programs in the state of Oklahoma PhD diss., University of Oklahoma.
- Puig, M. 2015. "Abandonament escolar prematur: Més pull que push." In Reptes de l'educació a Catalunya. Anuari 2015, edited by J. M Vilalta, 325–374. Barcelona: Fundació Jaume Bofill.
- Rumberger, R.W. 2011. Dropping Out. Why Students Drop Out of High School and What Can Be Done about It. Cambridge, MA and London, England: Harvard University press. doi:10.4159/ harvard.9780674063167.
- Ryan, L., and M. Lőrinc. 2018. "Perceptions, Prejudices and Possibilities: Young People Narrating Apprenticeship Experiences." British Journal of Sociology of Education 39 (6): 762-777. doi:10.1080/01425692.2017.1417821.
- Salvà-Mut, F., A. Cerdà-Navarro, and J. Sureda-Negre. 2019. "The Promotion of Educational Success in Intermediate Level VET: The Case of the Balearic Islands." In The School-Based Vocational Education and Training System in Spain. Achievements and Controversies, edited by F. Marhuenda-Fluixá, 167–186. Singapore: Springer. doi:10.1007/978-981-13-8475-2\_9.
- Salvà-Mut, F., M.F. Oliver-Trobat, and R. Comas-Forgas. 2014. "High School Dropout: The Students' Perspective." magis, Revista Internacional de Investigación en Educación 6 (13): 129-142. doi:10.11144/Javeriana.M6-13.AEDE.
- Schuller, K. 2018. "Trends in Ethnic Inequality in the Attainment of Vocational Degrees: A Cohort Study in Germany." British Journal of Sociology of Education 39 (4): 483-500. doi:10.1080/01425692.2017.1375399.
- Serrano, L., A. Soler, and L. Hernández. 2013. El abandono educativo temprano: Análisis del caso español. Valencia: Instituto Valenciano de Investigaciones Económicas.
- Stromback, T. 2010. "Earnings, Schooling and Vocational Education and Training." Australian Journal of Labour Economics 13 (3): 241-263.



- Struffolino, E., and C. Borgna. 2020. "Who Is Really 'Left-behind'? Half a Century of Gender Differences in the School to Work Transitions of Low Educated Youth." *Journal of Youth Studies*. Published electronically January 17. doi:10.1080/13676261.2020.1713308.
- Tanggaard, L. 2006. "Situating Gendered Learning in the Workplace." *Journal of Workplace Learning* 18 (4): 220–234. doi:10.1108/13665620610665827.
- Tanggaard, L. 2013. "An Exploration of Students' Own Explanations about Dropout in Vocational Education in a Danish Context." *Journal of Vocational Education & Training* 65 (3): 422–439. doi:10.1080/13636820.2013.834956.
- Tarabini, A., M. Curran, A. Montes, and LL. Parcerisa. 2019. "Can Educational Engagement Prevent Early School Leaving? Unpacking the School's Effect on Educational Success." *Educational Studies* 45 (2): 226–241. doi:10.1080/03055698.2018.1446327.
- Tarabini, A., and N. Ingram, eds. 2018. *Educational Choices, Transitions and Aspirations in Europe: Systemic, Institutional and Subjective Challenges*. London: Routledge.
- Taş, A., V. Bora, A. Selvitopu, and Y. Demirkaya. 2013. "Reasons for Dropout for Vocational High School Students." *Educational Sciences: Theory and Practice* 13 (3): 1561–1565. doi:10.12738/estp.2013.3.1398.
- UNESCO Institute for Statistics. 2012. *International Standard Classification of Education: ISCED* 2011. Montreal: UNESCO Institute for Statistics.
- Van Houtte, M., and D. Van Maele. 2012. "Students' Sense of Belonging in Technical/vocational Schools versus Academic Schools: The Mediating Role of Faculty Trust in Students." *Teachers College Record* 114 (7): 1–36. doi:10.1177/016146811211400706.
- Verd, J.M., O. Barranco, and M. Bolíbar. 2019. "Youth Employment and Employment Trajectories in Spain during the Great Recession: What are the Determinants?" *Journal of Labour Market Research* 53 (4): 1–20. doi:10.1186/s12651-019-0254-3.
- Yi, H., L. Zhang, Y. Yao, A. Wang, Y. Ma, Y. Shi, and S. Rozelle. 2015. "Exploring the Dropout Rates and Causes of Dropout in Upper-secondary Technical and Vocational Education and Training (TVET) Schools in China." *International Journal of Educational Development* 42: 115–123. doi:10.1016/j.ijedudev.2015.04.009.