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# Student employment in France: Hindrance rather than help for higher educational success?

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#### ABSTRACT

In this study, we examine how student employment impacts higher educational trajectories in France. Focussing on undergraduates' educational outcomes, we show the consequences of different intensities and levels of recurrence of student employment on perseverance in higher education. We use data from a nationally representative four-year longitudinal survey, descriptive analysis and logistic regression are performed to control for student characteristics. Our results suggest that student employment, especially when intensive and during periods of exams, increases exam failure. When it is recurrent over time, student employment often leads to university dropout. Furthermore, even for those who do manage to reconcile work and study, it lengthens the time spent in higher education. This consequence is particularly costly in France, where success in higher education is often judged by time-to-completion, encouraging strategies that lead to finishing degree requirements as quickly as possible. This approach is difficult to follow for students who must combine work and study, leading to particularly pronounced costs.

#### Introduction

Eurostudent harmonised data on national student populations reports that 42% of students in France having moved out of their parents' home are in employment during the academic year, which is slightly above the European average of 40%. The French Observatory of Student Life (*Observatoire National de la Vie étudiante*) even states that the rate is slightly higher for students as a whole: in 2016, 46% of students worked while in higher education, with the proportion of income from employment in students' budgets (33%) exceeding family support (25%) and public support (31%) (Belghith et al. 2017). Student employment very often determines the resources students have to continue in higher education and therefore raises the question of unequal achievement being related to unequal resources. The impact of student employment on

academic achievement, its responsibility for examination failure or university drop-out, but also its potential occupational value in the labour market are nowadays the subject of many analyses in France (e.g. Béduwé and Giret 2004; Beffy, Fougère, and Maurel 2009; Belghith 2015; Body, Bonnal, and Giret 2014; Pinto 2010; Wolff 2017; Zilloniz 2017) and elsewhere (e.g. Manthei and Gilmore 2005; Häkkinen 2006; Sanchez- Gelabert, Figueroa, and Elias 2017; Oonyu 2019). All of these studies agree, that it is important to take account of the diversity of student employment, ranging from holiday jobs to regular term-time employment by way of a string of more or less time-consuming casual jobs. Their results show that the impact of student employment on educational outcomes or job-market entry varies with the type of work, its connection with the academic coursework and its intensity.

This research sets out to examine more specifically the combined effects of recurrence and intensity of employment on student's academic success and educational outcomes. In France, the relatively low cost of university studies might encourage certain students with limited financial resources to attend university while also working to support themselves for the entirety of their time as a university student. However, long-lasting student employment leads to more difficulties studying and therefore in achieving academic success. The chronic lack of time given to study along with cumulative fatigue or again working students' limited involvement in the activities of the educational institution may lead to repeated failures and increase the risk of university drop-out. Moreover, the point in time in the academic year when students are in paid employment and the intensity of that work may also prove decisive.

To test these various hypotheses, it is necessary to have data that monitors students so as to directly relate employment with end-of-year exam success or, over the longer term, the effects of employment on their entire university education. This work is based on a panel of four successive surveys conducted in April 2013, 2014, 2015 and 2016.

The paper is subdivided into three sections. The first section reviews the literature to examine the connections between student employment and educational outcomes. Section 2 looks into the impact of student employment on their passing all of the examinations for the corresponding academic year. The third section shows to what extent student employment affects their educational achievement, especially in terms of university drop-out and the total length of time spent in higher education.

#### Connections between student employment and educational outcomes

The negative impact of student employment on academic achievement, understood as examination success or continuation in higher education, is frequently highlighted for France (e.g. Beffy, Fougère, and Maurel 2009; Body, Bonnal, and Giret 2014; Bonnal et al. 2019) and other countries (e.g. Ehrenberg and Sherman 1987; Darolia

2014; Triventi 2014; Hovdhaugen 2015) even if some work is more nuanced about its effects (e.g. Rothstein 2007; Wang et al. 2010; Roshchin and Rudakov 2017). Student employment encroaches on study time and compels students to cut back on the quantity and the quality of study time or even to miss lectures, which makes their conditions of study far more difficult. It can be hypothesised, then, that these changes in ways of studying will have a negative impact on actual achievement and entail failures that could have been averted had students been able to concentrate on their courses full time. However, this hypothesis can be relativised.

It presupposes that the relation with higher education and especially the ambition to successfully complete the courses they enrol for are the main factors motivating students. The French higher education system is often considered to have a dual structure that includes the universities on one side and the preparatory classes and grandes écoles on the other. This translates into a strong process of academic selection, but also a social and economic selection of students. With the exception of a few fields of study, universities are the less selective entry point into higher education. These different ways of accessing higher education result from the differentiation of secondary school pathways in France that lead to three different categories of baccalauréat diplomas. Students with professional secondary school diplomas (baccalauréat professionnel), and to a lesser extent those with technical diplomas (baccalauréat technologique), have lower chances of succeeding in their first years at university than those with general secondary school diplomas (baccalauréat general) (Brinbaum, Hugrée, and Poullaouec 2018). In France, the direct cost of accessing university is lower than in many other European countries. Tuition fees are relatively low (approximately 170 euros per year for a French university student, plus an additional 90 euros of student fees). Furthermore, students receive public financial aid, notably for housing: this aid, as a proportion of an average student budget, is double for university students as compared to students in business schools, despite the fact that university student budgets are 30% lower than those in business schools (Galland 2019). These characteristics of the 'mass university' may encourage students to enrol in university while also prioritising other paid or unpaid activities to the detriment of their ability to study (Lévy-Garboua 1976).

Therefore, the default option of some secondary school leavers, especially when they are denied entry to selective higher education, leads them to register in university courses for which they are neither prepared nor particularly motivated (Canals and Diebolt 2001). In this case, gainful employment is sometimes the consequence rather than the cause of exam failure. Beaupère and Boudesseul (2009) show that the responsibility of student employment for drop-out is to be understood in the light of students' interest for higher education and the significance they attribute to it. Paid work is that much more attractive to those who are not drawn to higher education. This may be seen, then, not as a need for income forcing young people to forego their studies, but instead as a 'preference' for a working life prompting them to take up employment and leave higher education. On the basis of a survey of students at a Belgian university, Baert et al. (2017) report that motivation related to career choice and in particular academic ambitions are decisive in explaining the degree of success of students who are in paid employment while in higher education.

Achieving academic success may also take longer for students who also hold down a job. Switching university courses or partial success in examinations lead to students resuming their education or repeating courses and so prolong the time spent completing courses without ending in failure for all that. It is therefore not so much the impact of student employment on examination success in the current year that needs to be evaluated as success over the full course of higher education and its completion up to the desired level. Now, as indicated by the literature review by Neyt et al. (2017) on the effects of student employment in several countries, being in employment seems to have effects that are even more detrimental to the choice of pursuing higher education and for students' general commitment than for success in any one particular year. Tur-Sinai, Romanov, and Zussman (2017) report for example that student employment increases the total length of time spent in higher education, especially for older students.

Lastly, the effect of student employment on academic achievement cannot be generalised to all students. Allowance must be made for the diversity of situations in which work and study are combined and that do not all impose the same constraints on students. Among those constraints, the number of hours spent at work appears to be decisive for academic achievement in France (Beffy, Fougère, and Maurel 2009) as elsewhere (Stinebrickner and Stinebrickner 2003). That research emphasises that, in France, holding down a job that is more than part-time generally proves very detrimental by the various measures of academic success (Beffy, Fougère, and Maurel 2009; Giret, 2011; Body, Bonnal, and Giret 2014). Conversely, such employment would seem to have no effect on academic achievement when it takes up less than 10 hours or so per week (Body, Bonnal, and Giret 2017). Belghith (2015) explains this for France by the effort put into studying and the time spent attending lectures: working more than part-time throughout the year seemingly leads to a drop in attendance at lectures for nearly one in two students, whereas absenteeism reportedly concerns just one in ten students for those who are not in work. Moulin et al. (2013) and Hovdhaugen (2015) show on the basis of longitudinal data for Canada and Norway that drop-out from higher education is greater among those who are in paid work more than 20 or 24 hours per week. Furthermore, not all types of employment have the same effect on educational outcomes. Work that is unconnected with higher education and in the private sector (except for jobs such as baby-sitting or help with homework) appears to be more detrimental (Body, Bonnal, and Giret 2014). Conversely, employment on campus reduces the risk of failure (Beeson and Wessel 2002): such work is often more compatible with the constraints of higher education, it reduces travel time and it is less detrimental to student integration in the educa- tional institution. Social inequalities between students structure their chances of accessing different types of employment. Young people from underprivileged backgrounds are less likely to find jobs that closely integrate their studies. Rather, they are more likely to have jobs concurrent with their studies and that are low skilled (Belghith 2015; Zilloniz 2017). Furthermore, young people who find student jobs that are highly skilled more often report that their job had little impact on their studies (Béduwé and Giret 2004). It seems that the motivation underlying the choice to engage in paid work explains at least part of the influence of these constraints for the least socially advantaged students. Students from low-income families who are not familiar with higher education are the most likely to report working to pay for their studies, while students from more advantaged families are more likely to report motivations linked to work experience and preparation for their future profession (Amar et al. 2019). It is also possible that certain students with the highest skilled jobs are better able to organise their time due to their familiarity with the constraints of post-secondary study, in connection notably with their social background.

Moreover, it might be thought that being in employment recurrently throughout higher education could result in an accumulation of difficulties that extends the length of time spent in higher education and increases the risk of drop-out in the medium term. Research in various countries (Carney, McNeish, and McColl 2005; Miller, Danner, and Staten 2008) shows that student employment affects physical and mental health by reducing hours of sleep or being a source of fatigue and risk-taking behaviour.

#### Methodology

#### **Research objectives**

The literature review shows that the effects of student employment on educational outcomes are complex to grasp. Our research seeks in particular to apprehend the effects of student employment on:

- exam success at the end of each academic year,
- dropping out, completing or continuing in higher education,
- the time lost on their academic course for students continuing their studies in 2016.

#### Data

The sample used for this research is from a longitudinal study that is representative nationally for France. The first round of questioning corresponds to the '2013 Living Conditions' survey conducted in June 2013 by the French Observatory of Student Life, which included undergraduates in French universities, except for those on health-related courses, corresponding to an initial sample of 9341 students. One of the interests of the research is that it monitors these students over time. Three further rounds of questioning were conducted in 2014, 2015 and 2016 by email and phone.<sup>1</sup> In total, 2693 young people replied to all four rounds (29% of the initial population). In 2015 and 2016, two questionnaires were administered, one for respondents from the previous year and one for non- respondents, including retrospective questions to fill the gaps in their higher educational back- ground. A longitudinal weighting coefficient was used to correct the non-response bias in 2014, 2015 and 2016 compared with the 2013 population and ensure the respondent population was nationally representative.

#### Measures

#### The short-term effect on success in any given year

We began by looking at students who reported they passed all their examinations in a given year with respect to their employment situation in the course of that year. A first dependent variable, success in year N, was therefore evaluated through the responses of students questioned in year N + 1. The data were taken from the three subsequent surveys, 2014, 2015 and 2016 and related to success in June 2013, 2014 and 2015. This was therefore a measure of short-term academic success. It can be hypothesised that the recurrent or intermittent nature of student employment alongside higher education does not impose the same constraints on students in terms of the way they organise their university and the way they live their student life. It is likely therefore that recurrent employment disrupts their university education more than occasional employment, which students (may) have more control over. It may also be thought that these constraints will weigh that much more heavily for students who have to work during exam periods.

The impact of student employment on success was tested by considering three categories of student employees as an exogenous variable: students in employment at the time of the exams and having worked throughout their time in higher education without interruption and in both academic semesters (recurrent employees); students in employment at the time of sitting their exams but having worked more or less intermittently in the past; and students having worked in the past but not in employment at the time of sitting their examinations. For each of these three categories, allowance was made for the time spent in employment (more or less 18 hours per week).

#### Effect on university education

A second way of evaluating the impact of student employment on academic success is to examine whether it alters students university education, apart from their exam success; whether they continue in higher education and the level they attain, or on the contrary whether they complete or abandon their education. Here we used the last wave of the survey, the one conducted in 2016 among the respondents from 2015 and the non-respondents to the surveys of 2014 and/or 2015. For these 2693 students, it was possible to reconstruct their university education and determine whether or not they were still in higher education in April of each year and whether or not they had been in employment that year. All these students were monitored over the four years from 2013 to 2016.

To better understand these higher educational backgrounds, two dependent variables were selected in turn. The first was for breaks in higher education, whether 'voluntary' or otherwise, when the students did not continue with their studies.<sup>2</sup> It was a matter of determining whether the break could be explained by the initial higher educational plan. If so, it was deemed the students had completed their studies; conversely, they were considered to have dropped out. The second dependent variable related to the level of higher education attained after four years for students who continued in higher education. It was used to detect whether students had repeated years or not.

The recurrence of employment situations was captured as an exogenous variable via the number of times students had been in paid work during their past four years in higher education. The hypothesis is that the more episodes of employment students have had in the course of their higher education, the greater the risk of them dropping out or repeated years for want of having had enough time for study. Notice, however, that a less ambitious choice in terms of the length of time spent in higher education may also be correlated with student employment, which makes it more difficult for students to see themselves spending a long time in higher education.

Four groups of student employees were identified: those having being in employment all the time (for four years between 2013 and 2016, representing 8.5% of students); those having been in employment frequently (three out of four years,

i.e. 14%); those having been in employment occasionally (two out of four years, i.e. 15.5%) and lastly those who were seldom in employment (just one year, i.e. 23%). Students who worked for four years (recurrent) were, by construction, in higher education in April. The others may or not have completed their studies. Students never having worked made up 39% of students questioned in 2016 and may also have or not have completed their higher education.

The effects of other independent variables related to student characteristics

Many studies of success in higher education in France show that socio-economic differences especially may also affect academic success and be correlated to a greater or lesser extent with student employment (e.g. Perret, Berthaud & Benoist, 2013). For the various dependent variables, *ceteris paribus* estimations were made by controlling for certain personal characteristics for the current year: sex and age, level and speciality of the course, nationality (French versus foreign), type of secondary education (general versus other type of baccalaureate), parents' social origin or being on a student grant.

#### Results

#### Student employment and examination success

The proportion of students in employment in April each year varies but is always at least one-third (40%, 32.5% and finally 36%). Students in part-time employment (i.e. <18 hours per week) make up the vast majority, being about twice as numerous as students in more than part-time employment (i.e.  $\geq$ 18 hours per week). The number of students in recurrent employment diminishes as they continue with their higher educational courses from year to year whereas numbers in intermittent employment increase; and so much so that students having never been in employment falls off steeply from 47% to 27% of students who continue with higher education courses. Table 1 relates to stated success rates of students who re-enrolled in higher education for each year after 2013.<sup>3</sup> For reasons of sample size, the results show the cumulative success rates of the three cohorts enrolled in first, second and third years of their degree course.

	Year 2012–2013			ear 2013–2014		Year 2014–2015		
		All exams		All exams passed		All exams passed		
	%	passed at end	%	at end of year	%	at end of year		
		of year						
In work in April: yes	40%	64.5%	32.5%	68%	36%	69%		
In work in April: no	60%	63.5%	67.5	% 77%	64%	73%		
In work in April $\geq$ 18 hours	5 13%	54%	8%	58%	11%	64%		
per week	27%	69%	24%	5 71%	25%	71%		
In work in April < 18 hour	s 60%	64%	67.5	% 77%	64%	73%		
per week In work in Apri	I:							
no	29%(1)	61%	21%	68%	10%	78%		
In work recurrently								
In work before exams	15%	73%	12%	68%	25%	65%		
(and in past)	10%	69%	20%	5 78%	37%	74%		
In work in past (but no	ot 46%	67%	47%	5 77%	27%	71%		
before exams)								
Never in work	12%	52%	6%	61%	4%	81%		
In work recurrently and $\geq$								
18 hours	17%	68%	15%	5 70%	6%	75%		
In work recurrently and	3%	68%	2%	52%	6%	51%		
< 18 hours	12%	74%	9.5%	6 72%	19%	70%		
In work before exams	10%	69%	20%	5 78%	37%	74%		
and ≥ 18 hours	46%	67%	47%	5 77%	27%	71%		
In work before exams and	<							
18 hours								
In work in past Never i	n							
work	100%	64%	1009	6 74%	100%	5 71%		
Total								
Number with no break	338		405		389			
in studies at N	037(1)	)	924		845			

Table 1. Total pass rate (two semesters) of end-of-year examinations.

<u>Sources</u>: Post-OVE surveys 2014, 2015 and 2016. Weighted numbers. <u>Read as</u>: 40% of students were in paid work (excluding apprenticeships and paid internships) in April 2013 and 64.5% of that number passed all their 2012–2013 year-end exams.

(1) Those in work recurrently in 2013 are students who declared in 2013 they were in paid employment previous year and were therefore already in higher education in 2012 (338 037 among 452 418).

For each wave of the survey, the aggregate validation rate is high (64%, 74% and 71%) and the differences between students in employment and full-time students in April are comparatively small (+1, -9% and -4%), albeit to the detriment of those in employment. The pass rate among students in employment varies with the time they spend at work (it is consistently lower if they spend more than 18 hours per week at work) and depending on how their employment fits in with their course (generally a lower pass rate if their employment encroaches on examination periods, with the

notable exception of students in recurrent employment in 2015, who on the contrary reported the best scores). The results are more nuanced when the two criteria are cross-compared: intensive employment at examination time is invariably detrimental, whether recurrent or intermittent. However, in 2015, while students in recurrent employment worked for three years continuously alongside their higher education, they were on average more successful than other students (81%) and much more so than students in intermittent employment in the past (51%). Successfully combining employment and higher education on a recurrent basis, provided students do not drop out obviously, seems to be the signal they have good organisational abilities or are highly motivated, which may account for this finding.

	TUDat	Year 2012–	ing all exa	Year 2013–2014		Year 2014–2015
		2013		Teal 2015-2014		Teal 2014-2015
		Probability o	f	Probability of		Probability of
		passing	/1	passing		passing
		all exams by	,	all exams by end	4	all exams by end
		end		an examp by end	A	an examp by end
	%	of year	%	of year	%	of year
In work in April: yes	40%	ns	32.5%	-0.19*	36%	-0.17*
, In work in April: no	60%	Ref.	67.5%	Ref.	64%	Ref.
In work in April ≥	13%	-0.19*	8%	-0.39**	11%	-0.37**
18 hours per week	27%	+0.16**	24%	ns	25%	ns
In work in April <	60%	ref	67.5%	Ref.	64%	Ref.
18 hours per week In work in April: no		-				
In work recurrently	29%	ns (1)	21%	Ns	10%	ns
In work before	15%	ns	12%	ns	25%	-0.26**
exams	10%	ns	20%	ns	37%	ns
In work in past	46%	Ref.	47%	ref.	27%	Ref.
Never in work						
In work recurrently	12%	-0.34***	6%	Ns	4%	Ns
and ≥ 18 hours	17%	ns	15%	Ns	6%	ns
In work recurrently		ns	2%	Ns	6%	-0.61***
and < 18 hours	12%	+0.21*	9.5%	ns	19%	Ns
In work before	10%	ns	20%	Ns	37%	ns
exams and ≥	46%	Ref.	47%	Ref.	27%	Ref.
18 hours						
In work before						
exams and <						
18 hours						
In work in past						
Never in work						
	100%	64%	100%	74%	100%	71%
	452		405		389	
	418 338		924		845	
	037					

 Table 2. Probability of passing all exams (two semesters) by end of year.

Sources: Post-OVE surveys 2014, 2015 and 2016.

For clarity, the details of these results (available from authors) are omitted from this table which focus instead on the net effects of paid employment. These logistic regressions allow for sex, level of qualification in 2013 (year 1, year 2, year 3 and year 3 vocational), speciality group (humanities, sciences, and law, economics and management), nationality (French v. foreign), type of baccalaureate (general or not), parents' socio-occupational category (executive or liberal profession, v. not), grant student and then the characteristics of student employment as indicated in the table rows (time  $\geq 1 + 8$  hours or not, recurrent employment, employment before exams or in past and cross matching of time and recurrence). Significance of regression coefficient: \*\*\* Indicates significance at 1% level, \*\* at 5% level., \* at 10%

Table 2 shows the results of *ceteris paribus* estimations based on logistic regressions. The different configurations of student employment presented in Table 1 were tested. The reference population is still students never having worked between 2013 and the year under consideration (Table 2). It makes allowance for individual characteristics, especially for the undergraduate year in which students are registered. The results reveal that being in employment often affects exam success and that all the crude deviations observed in Table 1 are not all confirmed. This can be explained by the fact that exam results are very significantly impacted by the course of study and especially by being in first, second or third year.

That being so, it turns out that students who were in employment in April, that is, at the time of the examinations, passed all of their exams less often than students who were not in employment, for 2014 and 2015, but not for 2013 (Table 2, row 1). However, these students did manage to validate part of their year (8% in 2013, 7% in 2014 and 4% in 2015), which differentiates them from students reporting total failure (27%, 19% and 24%, respectively). The same *ceteris paribus* analyses show that being in employment has no effect on total failure for the three years. This suggests that some students who are in employment take longer to validate their year in full.

Exam pass rates diverge between students in employment who work more or less than part-time (18 hours) in the exam period. Long-working hours are invariably (very) detrimental whereas less time-consuming hours of employment generally have no effect, except at the beginning of the course (2013) when they (slightly) raise the chances of passing (Table 2, row 2).

When we look at the effects of employment over time, our results reveal that having worked in the past is not in itself detrimental (Table 2, row 3). There is no significant difference in the profiles of students in recurrent and intermittent employment, except for those in intermittent employment and in employment during the examination period in 2015 who had a lower pass rate. This adverse effect on pass rates in 2015 is largely down to students in more than part-time employment in the exam period (Table 2, row 4). Conversely, students who were continually in more than part-time employment throughout their higher education, including in the exam period, did not fare worse than students who were not in employment, except in 2013, at the beginning of their academic careers. This adverse impact subsequently faded while seniority in student employment increased. These findings invalidate the hypothesis that there is a positive link between recurrent student employment, including for more than parttime employment, and academic failure. One explanation is that these students have probably learnt to live with this employment status which they have maintained since they began their higher education. It may also be that they have found employment that is less disruptive, more flexible and that fits better into their academic timetable. In any event, these students who have continually been in employment (22% of students in 2014, 21% in 2015 and 10% in 2016) have in some sense 'survived' employment and this ability to combine employment and higher education strengthens as their student years go by. They seem to form a highly specific group within the student population (4.5% of students continuing in education in 2015), and it may be thought that their motivations and conditions of employment and study change over time. While the results confirm the 'disruptive' character of combining higher education and employment on academic success in any given year it is also shown that there is no systematic negative connection. Contrary to what might be expected, being in recurrent employment does not seem to have any specific effect on the exam pass rate for the current year. However, that pass rate does remain dependent on the number of hours students spend in employment in the exam period.

#### Student employment and university education

#### Employment and completing versus dropping out of higher education

The foregoing analysis does not enable us to identify the connections between employment and breaks in higher education. Now, the longitudinal study shows that three out of four students (72%) enrolled in one of the three undergraduate years in 2013 were still in education three years later. It is on average less frequent for students having been in employment to be continuing in higher education three years on: they make up 66% on average versus 73% for those who have never been in employment.

Continuation in higher education obviously varies greatly with the starting level in 2013: 82% of first-year students and 85% of second-year students were still in higher education three years later, but only 49% of third-year students on general degree courses and 16% on vocational degree courses, because of the 'normal' completion of their higher education. Accordingly, those third-year undergraduates in 2013 still in higher education in 2016 were for the most part repeating their third year (66% four and five years after leaving secondary education). A minority of them (9%) were on doctoral courses. While some had attained the level they wanted to and so completed their higher education and gone into the world of work, this was not so for those who, for one reason or another, had been unable to continue and had dropped out before reaching the desired level.

Table 3 relates to students in education in April 2015 and their situation in April 2016, the final period of observation in the survey. It distinguishes between break due to termination of education and drop-out during this last

year depending on whether or not students were in employment in the previous years.

Some 23% of students registered in 2015 were no longer in higher education in April 2016.<sup>4</sup> This was because of drop-out for 39% on average, but for 28% of students who had never been in employment and 33% of students having being employed briefly and more than half of the students having been in employment during two or three years between 2013 and 2015 (Table 3, Column 3). Other factors may, however, interfere with the feeling of having reached the desired level or not, such as the level of education in 2013 and the validation of the successive examinations. Again we used a model that allows for these different factors in estimating the probability of completion or drop-out relative to continuing in education (multinomial logit mode, Table 3, column 4). As expected, exam failure, especially in 2015, led all students to consider that non-continuation was drop-out and not a desired completion of education. Controlling for this, the results show that students in recurrent employment dropped out of education before reaching the desired level (+0.51) more often and that students who were frequently in employment less often stopped their courses because they had reached their desired level of education (-0.5). Accordingly, for comparable final levels of education and equivalent pass rates, students in employment (recurrently or frequently) who do not continue have the feeling of dropping out more than students who have never been in employment. This finding can be explained by a phenomenon of wear and tear of these students who have to cope with difficult educational conditions if not with more frequent failure.

Students were also asked to state their reasons for dropping out. None of the suggested responses referred explicitly to the incompatibility of being in higher education and in employment at the same time (Table 4). In 2016, almost no students whether in employment or not mentioned financial reasons unlike in 2015. Only the lack of motivation is really put forward as a ground for dropping out. The gap in motivation between students in employment (47%) and not in employment (25%) widened. More than any formal preclusion because of financial constraints, it seems that it is wear and tear because of difficult educational conditions that leads students in employment to drop out of higher education.

#### Student employment and level attained in 2016

If students in employment have more difficulty with their university education, do they take longer to obtain their qualifications? In many educational systems, this delay is not necessarily synonymous with failure for students who may gain different experience in the course of their higher education. However, successful university education in France remains marked by strategies for acceding as quickly as possible to the final educational qualification (Van de Velde 2008; Charles 2014). Falling behind timewise in education may even be penalised in wage terms in the labour market (Brodaty, Gary-Bobo, and Prieto 2009).

		n in April 2016 of your on in April 2015	ng people who were in			Probability of reached their level of educatic dropped out of rather than cont 2016 (1)	studies
Number of years with combined work and study between 2013 and 2015	In studies	Left with having reached the desired level of education	Left without having reached the desired level of studies (Dropout)	Total		Having reached their desired level of education	Drop-out
0: never in work	82	13	5	100 %	28 %	Ref.	Ref.
1: rarely in work (1/3)	76	16	8	100 %	33 %	Ns	Ns
2: frequently in work (2/3)	77	11	12	100 %	52 %	- 0.5 **	Ns
3: recurrently in work (3/3)	70	14	16	100 %	53 %	Ns	+ 0.51 ***
Respondents for 2016 still in education in 2015	77	14	9	100 %	39 %	1774	
				389 845		389 845	

Table 3. Paid employment, completion versus termination of studies between 2015 and 2016.

<u>Source</u>: Post-OVE 2016 survey, complete file (all 2016 respondents, including non-respondents for 2014 and/or 2015). (1) Multinomial logit model allowing for sex, age, nationality, social background, grant, accommodation, family situation and starting qualification in 2013, and exam passes 2013/2014 and 2015. The reference category for the dependant variable is 'In studies in 2016'. Significance of regression coefficient: \*\*\* Indicates significance at 1% level, \*\* at 5% level., \* at 10%.

Table 4. Reasons stated for drop-out.

	All dro	p-Emplo	oyment	Not	in
	outs (1)	befor	e drop	o-employ	yment
		out		before	drop-
				out	
	201 201	6 2015	2016	2015	2016
	5				
To all, Why did you stop your studies? [severa	al				
answers possible]					
Not accepted on desired course	9% 22%	<b>6 9%</b>	19%	10%	25%
Found employment	21% 15%	۶ <sup>6</sup> 27%	19%	15%	10%
Financial reasons	42% 14%	6 <b>46</b> %	13%	37%	14%
Health reasons, family problems	12%	12%		12%	
Lack of motivation	37% 38%	6 <b>41%</b>	47%	32%	25%

Source: Post-OVE 2015 and IREDU 2016 surveys, complete file.

(1) Left studies before reaching desired level.

To answer this question, we tried to evaluate any delay compared with a 'theoretical length of time to obtain a qualification' using the level attained by students in 2016. More specifically, we considered the proportion of students having attained a level N + 3 in 2016 compared with their level N of 2013, that is a level Bac +4 if they were in year 1 in 2013, Bac +5 if they were in year 2 and more than Bac +5 if they were in year 3. These students were considered to be 'on time'. We then identified the students who ended with a level one or two years below this theoretical level and who could be likened, as a first approximation, to students who were 'behind'. Lastly, a third category included students who, in three years of higher education, had reached a level that was below or equal to their starting level. It was considered that these were the most radical changes in university education, involving 'course switching'. Table 5 shows that students who continued their educational courses and who were 'on time' did not make up the majority (42%). Students who were 'behind' were slight more numerous (49%). Lastly 'course switches' made up 9%.

Being 'on time' or 'behind' in higher education depends, and sometimes very much so, on whether or not students are in employment. Generally, fewer students who are in employment are 'on time' and on the contrary more of them are 'behind' with their education compared to those who has never worked. This is particularly the case for students in recurrent employment, among whom 66% are 'behind' and 26% 'on time', which is a gap of more than

20 points with students who have never worked. Conversely, students having being in employment just once are the ones who fare best, as if trying and then leaving employment resulted in a decision to concentrate fully on higher education.

	Level at continue		)16 where educa		of variable on pility of being ne' (1)
	'On	time'			
Number	ofstudent	s: Course	Delays:	level	
years	Level N	l + 3switch	es: N + 2 or N	I + 1Total All	Year 1 Year 2
combining	com-	paredlevel	lowercompared	l	
work a			r equalwith level	N in	
study	2013	to 201	3 level 2013		
	in45	8	47	100% Ref.	Ref. Ref.
work			10		
1: rarely	in47	10	42	100% Ns	Ns ns
work (1/					
4) 2: occasiona	11.711	7	52	100% Ns	Ns ns
in	111y41	/	52	100/0105	INS 115
work (2/4)					
3: frequen	tlv41	14	45	100% ns	ns ns
in	, .=				
work (3/4)					
4: recurren	tly26	8	66	100%-0.77	-0.89 -0.83
in				***	** **
work (4/4)					
2016	42	9	49	100% 291	126 112
respondents				031	
in educatio	n			291	546 132
without				031	
breaks					
since 2013					

 Table 5. Employment and level attained after three years in higher education.

Source: Post-OVE 2016 survey, complete file.

logit model, variables included: sex, nationality, age, living with partner, grant, from large family, lle de France accommodation, executive father and/or mother (in 2013 for all variables), level of education (year 1, year 2, year 3, year 3 vocational) and discipline studied, and having passed exams in part or in full for 2013 and/or 2014 and/or 2015. Significance of regression coefficient: \*\*\* Indicates significance at 1% level, \*\* at 5% level., \* at 10%

It may be wondered, however, for students in employment who besides tend more often to pass just part of their exams, to what extent this delay is due to failure or to being in employment. The final column of Table 5 shows the results of a logit model for studying the determinants of the likelihood of being 'on time' in 2016. Having controlled for the various characteristics of students and their higher education, only students in recurrent employment have a lower probability of attaining a level three years on from the starting level without any delay. These results are confirmed if we consider these probabilities separately for students enrolled in first or second year in 2013: recurrent student employment invariably reduces the chances of being 'on time' in their education and very markedly so. A final logistic regression the results of which are not presented in this paper shows that the smaller proportion of students in recurrent employment among students who are 'on time' is due to them repeating years rather than switching courses.

#### Conclusion and discussion

The set of results reported here confirms that student employment disrupts their higher education. First, it reduces their chances of fully validating their academic year with each examination and second it increases the risk of a break in education or even of drop-out. Lastly, it lengthens the time spent in higher education where students do continue. However, there are nuances depending on the number of hours spent in employment and on whether it is occasional, frequent, or recurrent. Short periods or short hours of employment are much less disruptive than regular, frequent and continuous student employment. However, students who do work throughout their time in higher education, provided they do not drop out, offset their more frequent failures in exams by prolonging their time in higher education. The results of this research need to be extended so as to understand how the type of employment or the way students adapt to the combined demands on their time reduce academic failure, delay or dropout.

In addition, our research only allows us to identify paid employment during university studies. However, students might also have other activities that take away from their time for study, such as unpaid childcare work within their family, unpaid apprenticeships or internships to bolster their CV, or other more informal activities within the non-profit sector. These activities cannot always be combined cumulatively, which drives students to make choices, in particular in regards to their financial resources. Certain activities such as an unpaid internship in a prestigious firm or an international exchange at another university can lead to later advantages in one's professional or university career (Sarfati 2015). Thus, a student who needs to work in order to finance her studies is likely to be more constrained in these choices. However, we also need to think about how universities can help facilitate their success.

Adapting courses proposed to students who are in employment may be one way of reconciling education and employment and reducing failure rates at the end of the academic year (Body, Bonnal, and Giret 2017). Measures are already in place in French universities where students in employment benefit from priority of choice for taught classes, authorisations to miss classes, or classes or tutor- ship organised in the evenings or on Saturdays. It might also be thought that the development of hybrid teaching (attendance and distance) might facilitate higher education while in employment.<sup>5</sup> Even so, students must be fully informed of the various measures in place to promote this. Yet students who are in employment are often less well integrated into their higher education institutions and university life because of these constraints (Broadbridge and Swanson 2005).

Another possibility is to propose or select jobs that are compatible with higher education, because they are based on campus, because they do not exceed a certain number of hours, and because the employers agree to release students in the periods preceding examinations. An experiment by Dmitrijeva et al. (2014) at the University of Le Mans (France) shows that a forum for jobs preselected by the university can prevent higher failure rates among students in employment. Work in various countries also shows that employment on campus seems less detrimental and increases students' well-being by facilitating their integration (Duhon 2011). The 2016 survey of France's Observatory of Student Life reveals that 15.8% of students in 2016 were employed within their higher education institution. However, these are often very episodic and relatively poorly paid jobs.

The question also arises of the level of resources needed to live on and to pay for education. For the set of students in employment, the average income from their jobs is slightly under €600 (Béduwé and Giret 2016), which comes to more than the combined amount of public aid and support paid by parents for these students. This income enables students from less-favoured back- grounds to leave their parents' home and live independently, while avoiding financial poverty or hardship (Galland 2016). The low registration fees for French universities often obscures the debate about the cost of living for students and especially accommodation costs in large university cities like Paris, which imply students must find ever more sources of income.

In conclusion, it appears that these results also help to explain the low percentage of non- traditional students in French universities. Charles (2014)

uses transportation metaphors to compare higher educational trajectories in France with those in other countries. French students are encouraged to use the 'high-speed train': the trajectory is linear and stops are rare in order to arrive at the destination as quickly as possible. Getting off the train or changing one's destination can be time- consuming and costly. In other countries, such as Denmark for example, higher educational trajectories are more like the subway: there are many options for changing direction and switching at a station is not difficult, because trains pass frequently in the subway stations. If we continue this metaphor, student employment allows one access to a cheaper train ticket in France, but lowers one's chances of arriving at the destination on time and may cause one to exit the train before arriving or find the rails blocked.

#### Notes

This additional survey was funded by the French Observatory of Student Life and subcontracted to a French research institute.

In France, although the majority of students enrolled in the first years of degree courses hope to earn a masters' degree (M 2) qualification, some may opt to take a vocational degree in their third year and stop at that point or to prepare competitive examinations for civil service jobs.

The success rate does not include students having stopped their studies before the beginning of each year. A longitudinal approach will be adopted in next subsection.

Numbers were higher than in the previous surveys (10% in April 2014 and 16% in April 2015), which can be explained by some of the sample having completed their education between 2015 and 2016.

A more subjective question was put at the end of the survey to all students about means, which in their view best reconciled paid work and studies. Some 52% of all students think distance teaching would be a good way to help students in employment, but this is the case of 75% of students in recurrent employment and more than 60% of those having discontinued education.

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