

PREVENTIVE MEASURES TO REDUCE THE DROPOUT RATE IN HIGHER EDUCATION

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Abstract

This paper is grounded in the human capital theory that considers the effects of education in economy in general and in the individuals' earnings in particular [1]. For a country to develop it's important to have an educated and qualified population [2].

However, Portugal, in 2016, was in the top three countries of OECD (Organisation for Economic Co-operation and Development) with the lowest percentage (23.9%) of adult population with a higher education degree, almost 40% below the 35.7% of the OECD average [3].

Therefore, it is relevant to understand students' motivations and expectations in order to prevent dropout and also to increase the success rate. To do so, a study was conducted in a Portuguese higher education institution in collaboration with the 2nd year marketing undergraduate students. The main objective was to plan and develop measures to prevent dropout as an academic exercise and with student's insights.

Keywords: dropout rate, higher education, preventive measures.

1 INTRODUCTION

This paper is grounded on the human capital theory, a concept that has a basic premise that the individuals that belong to a society are a form of capital in which the society can invest in the same way as they invest in physical capital [4].

The human capital theory analyses the effects of education in economy in general and in the individuals' earnings in particular [1]. For a country to develop it's important to have an educated and qualified population [2]. Some studies state already that in near future the majority of jobs (85%) will require qualified people. The dropout rate also affects unemployment rates since individuals with higher education are less likely to be unemployed [5]. For instance, the dropout rate in Spain "imposes a great cost on the entire economy reaching the sum of 5,772 euros per year and per student and exceeding the amount of 1,500 million euros if the student drops out during the first cycle" [5].

Portugal in 2015 was in the top five countries of the OECD (Organisation for Economic Co-operation and Development) with the highest percentage of adults (54.9%), with ages ranging from 25 to 64 years that did not complete secondary education while the OECD average is 23.5% [6]. Portugal also belongs to the top three countries of the OECD with the lowest percentage (23.9%) of adult population with a higher education degree, almost 40% below the 35.7% of the OECD average [3].

There is also an increasing tendency in the number of young people that do not study, do not work or are "parked" in higher education until they dropout. It is relevant to understand students' motivations and expectations in order to prevent dropout and, if possible, to increase the success rate in concluding their degrees [7]. In this study we understand dropout according to Tinto definition "a student voluntary drop out is anyone who withdraws from the institution without completing the academic program in which the student was enrolled" [8]. It's a process that results from a failed interaction between students as well as between the academic and social system at the higher education institution and ultimately results in the students leaving the academic system [8], [9].

The dropout phenomenon is very challenging to evaluate due to the some difficulties to obtain information from the students after they abandon their degrees. Therefore, the main objective to this research was to plan and develop measures to prevent dropout. In order to achieve that we established other objectives, namely we intended to understand the students, who they are and how are they perceiving their academic path, and how are they currently regarding the prospect of abandoning tertiary education.

To do so, a study was conducted in a Portuguese higher education institution (ESACT – School of Public Management, Communication and Tourism from the Polytechnic Institute of Bragança) developed with the 2nd year undergraduate students from the marketing degree.

2 DROPOUT AND PREVENTING MEASURES

To understand the dropout process it is necessary to know the main motives students have to drop out of tertiary education. We can find in literature some models that explain the main motives and how they influence the students during their academic path until this outcome, i.e. dropout [7].

In previous studies conducted in Spain they reduced the dropout motives to three main ones, namely dissatisfaction with the students' experience, family and work responsibilities and economic difficulties [10]. Another study conducted in Latvia found that almost 35% of the students leave in their first year and that the main reasons concern low secondary school knowledge and low motivation [11]. Other authors identify financial problems, poor secondary school preparation, conflicts with family and work commitments, uncertainty of the student, lack of quality time with teachers and counsellors, demotivating school environment, and lack of student support [12]. Another study in UK reveals that students that lack preparation before they enter a higher education institution, not collecting beforehand information's about the institution or the degree are more likely to drop out in the first year [13].

The reasons for dropout can be divided into six distinct factors: psycho educational, evolutionary, family, economic, institutional and social factors. The main dropout motives are related, among others, to incompatibility with work, economy, university (environment, teachers and difficulties) and so on [5].

Based on Tinto's 'student integration model', German research on higher education has experienced partially different developments of theoretical approaches to student dropout. Today, preference goes to those models of dropout that describe the issue as a complex process in which individual, institutional and social factors affect the socialisation in the education process and studies. According to the findings of empirical studies, the inability to cope with the performance-related demands of the higher education institution, wrong expectations and less identification with the subject, as well as problems in financing studies are considered to be the most important reasons for dropping out [9].

We can categorize the motives as extrinsic and intrinsic motives. Under the extrinsic motives we identify those that are out of the students' control, such as financial motives, family or institutional aspects (procedures, curricula, and so on). Under the intrinsic motives we classify those that are under the students' control, such as lack of motivation, homesickness, and lack of preparation to live alone with all the responsibilities encompassed. The next chart illustrates the academic path and the influences students feel, identifying the negative ones, according to Tinto, Pascarella and Bourdieu ([7], [8]) (Figure 1).

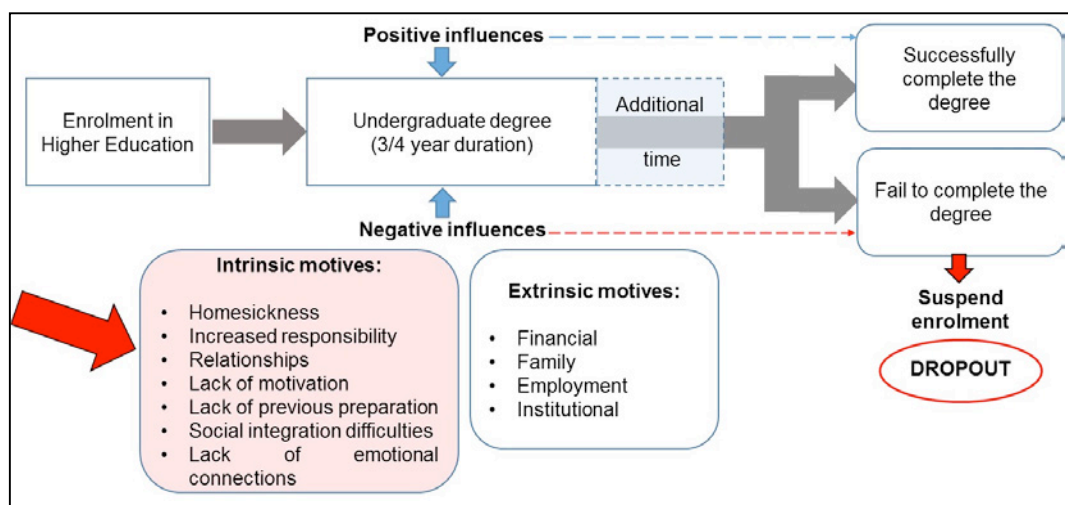


Figure 1. Dropout reasons during the academic path
Source: Own elaboration (Adapted [7], [8]).

As can be seen in figure 1, the motives that lead students to dropout can be of extrinsic or intrinsic nature.

The influence of extrinsic motives are recognized for long time and we also recognize that they have a severe impact on students motivation and willingness to dropout from their degrees, however, some of them are already being continuously controlled, e.g. financial motives are under the supervision of the academic social services [14].

According to Tinto's model and to the objectives of this study we focused only on the intrinsic motives [8]. Bulbul refers that "(...) efficient counseling support can be a solution to many problems that lead to student dropouts" such as the main intrinsic reason found in that study: poor academic adaptation [14]. In this approach some preventive measures have already been implemented or are being considered.

We find some studies that address this reason, such as in German, where higher education institutions and higher education policy react to this situation with broad assistance measures that include a flexible curricula, better information for students and the expansion of the support offered during the start of the studies [8].

In Portugal this is also a problem well recognized and addressed for several years and some main approaches have been developed and policies have been considered [16] however the dropout rate is still high.

Since the risk of dropping out is the highest in the first year, the preventive measures and actions could probably be more effective if they focused on the first year of the degree and helped students persist during that first year [15]

Since this paper focuses on research made by the students we focused only on those reasons that they can understand and plan active measures to prevent them, as such, the empiric research described in next section focused only on the intrinsic influences.

3 THE PORTUGUESE CASE

The study was conducted in a Portuguese higher education institution (ESACT – School of Public Management, Communication and Tourism of the Polytechnic Institute of Bragança) developed in collaboration with the 2nd year undergraduate students of the marketing degree, as part of their evaluation on the market research subject. The objective was to understand how the rest of the students from undergraduate degrees feel about their attendance, their future, and also where do they stand regarding the possibility of abandoning school.

In ESACT we have eight undergraduate degrees, that have three academic years, reaching almost 1,300 students and in 2016 it was registered a dropout rate around 10% in the first year.

3.1 The methodology

The methodology followed was a sequential mixed methods approach, starting with a qualitative approach followed by a quantitative approach. We began the research using a qualitative approach supported by in-depth interviews that intended to interview students from the three years and from the eight different degrees lectured in ESACT. These students were selected by appointment of the degree director, and among the students selected were usually the representative students of each year of the different degrees and 19 in-depth interviews were conducted. The interviews were conducted by the marketing students using the same script. Following the qualitative analysis a discussion took place to debate the results and to propose some preventive measures.

The qualitative analysis and subsequent discussion presented the foundations for the quantitative approach. The objectives of the quantitative analysis were to identify some variables that would allow us to signal students' propensity to drop out of higher education and also to make the inquired students reflect on the proposed measures [17]. An on-line questionnaire was implemented and about 400 answers were gathered.

3.2 Results

The analysis of the qualitative data collected by the in-depth interviews using content analysis with the software NVivo 11.0 allowed us to better understand what are the students' perceptions about their

own and their colleagues willingness to dropout and also what reasons they identified that could cause that.

Every student interviewed knew a colleague that went to a different degree or institution, so it was easy for them to recognize mobility. However, they had difficulties identifying a colleague that was a potential dropout and when they did it was only because that particular colleague “skipped classes”, “didn’t care about passing” and was “always partying”. They couldn’t identify potential dropouts based on any other reason.

They all stated that they had thought of dropping out in the first year for lack of preparation and a few also referred for homesickness since they were originally from distant locations and had less opportunities to go home.

The preventive measures proposed are pedagogic measures, increase participation of the institution in the integration process, better guidance/counselling from the institution, higher commitment of the students’ degree representative and also an effective colleagues’ involvement.

Afterwards, a quantitative analysis was conducted and 388 responses were obtained using an online questionnaire. The questions, supported on the considerations that arouse from the qualitative analysis, covered some personal characteristics and some aspects regarding motivation and satisfaction. With this we were able to characterize the students that answered the questionnaire and we could determine how they felt about the curricula, the institution, their academic perspectives and personal motivation. Since the questionnaire was presented in social networks and the respondents were all linked, we acknowledge that there are some serious bias, nonetheless, the data presented a Cronbach’s alpha of 0.839 which suggests a good internal reliability of the data.

The respondents were mainly females (70.2%) and their ages were in the majority of cases (74.8%) between 18 and 22 years of age and almost all the students had less than 27 years (95.6%).

The majority of the students came from the north of the country (67.9%) and 24.7% came from the central region which is consistent with previous studies that report a 120 km influence perimeter. The remaining were from the south, islands or foreign countries.

Although we only wanted to survey the undergraduate students, we had 87.6% of the responses from undergraduate (82.4% regular undergraduate and 5.2% professional undergraduate) and 11.9% from master degree students. Only two respondents attended a PhD degree. The scientific areas were divided between management and economics (46.2%), 12.2% health related, 11.3% law, 10.0 multimedia, tourism 6.1%, and engineering 9.1%.

The students attended the first year (34.8%), second year (35.3%), third year (25.2%) and the fourth year (4.7%). Again, we found some responses that were not on our scope since we only wanted to study the perception of the undergraduate from 1st to 3rd years.

The students reported a monthly spending of more than 300 euros to study (57.3%) which led us to believe that they are away from their homes (or their parents’ home) and so are more prone to be homesick and demotivated. Almost 43% stated that they had some sort of support (scholarship).

When asked if they were retained in a year (that means if they failed to pass) 15.0% answered positively. When we looked to the academic year it was not statistically relevant that the students that failed to pass were from a certain year ($p=0.270$), as such we cannot find a higher retention rate in the first year.

When we asked about how they felt, and about the institution and the degree they attended, we had the following aspects:

Almost 27% felt demotivated. 29.6% of the students were unsatisfied or indifferent to the institution they attended. In this parameter we also found that 44.9% were satisfied and 25.5% highly satisfied with the institution.

Trying to understand the motivation, or lack of it, we also asked about the expectations about the degree, if the degree was above or below what was expected. In this item we also had a positive response with only 10.1% stating that it was below expectation. The rest referred it was above, and in those 66.7% referred that it was way better than they expected.

The last item was about the curricula of the degree and in this item we had almost 50% (45.9%) stating that they were unsatisfied or indifferent to the curricula with 54.3% satisfied or highly satisfied

(13.0%). We had no statistical association between the students that felt demotivated and the ones unsatisfied with the curricula ($p=0,350$).

4 DISCUSSION AND FUTURE WORK

We found that the students are not very connected with other students or concerned about colleagues' dropout risks. In fact, it is clear that other than their circle of friend they are oblivious to their colleagues. And even in their close circle they can only identify the ones that have an erratic academic behaviour and apparently they do not go deep about their colleagues' state of mind or motivation.

Some of the preventive measures planned were previously adopted (with intention to reduce the retention rate) such as supportive classes for students that had no adequate academic background and were abandoned due to poor results. Currently the institution is testing a pilot program, monitored by a Finish University that intends to implement active methodologies in some course units in order to increase the students' participation, autonomy and motivation. This program began in February 2018.

The institution is developing some integration sessions to make the students more aware of other students' difficulties and realities and already provides some guidance.

We couldn't statistically identify variables that would allow us to signal potential dropout students. However the survey, in a more detailed version, was repeated and a more detailed study is being prepared that will clarify some aspects of this study.

The results obtained, led us to believe that a better and more personal contact with the students could make them feel less alone, more integrated and more motivated to attend classes. As such, a pilot support system should be prepared, collecting a group of volunteers to be the "big brother" of the new students, and so the third year students could sponsor the freshmen. This would be an extension of what already occurs during academic reception were the 3rd year students accept a godson or goddaughter and accompanies them through the reception period and academic traditions. As such, these students would be required to maintain that supervision the entire year and not just during the first two months.

Alongside there should be a monitoring moment of the sponsor students in the middle of the year in order to help at an early stage students that are facing the possibility of dropping out.

In September 2018, next admission moment, these measures will be implemented with the help of the students association. With these measures we believe the dropout rate would be reduced or at least the students that want to dropout will be identified in an earlier stage and possibly the decision can be reversed, since, in theory, they would help the students overcome some of the major reasons that lead to disappointment, lack of motivation, bad results and ultimately dropout.

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