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# Examining the Antecedents of Higher Education Dropout and Identifying Prevention Solutions Study Context: Catalan Public Universities

**Doctoral Dissertation**

PhD Candidate: Hind G. Naaman

Supervisor: Dr. Georgeta Ion

Universitat Autònoma de Barcelona
Department of Applied Pedagogy
Ph.D. in Education
Line of Research: University: organizational culture, management, and governance,
leadership, gender, teacher development
Bellaterra, November 21

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# Acknowledgment

Fifteen years ago, in the beginning of my university journey, a new professor, Dr. Rana Khoudary, graduating recently from England, came to teach us at the Lebanese University. Young, smart, knowledgeable, experienced, humble, beautiful, full of life, and with a genuine smile. She was one of the people I adsmired the most, and I started building this dream that one day, I will reach this far, to be in this position, young and holding a PhD from abroad.

The funny part is that it was just a dream and there were too many boundaries stopping me from leaving the country, but then, 10 years later, the universe worked in magical ways, and I left Lebanon, came to Barcelona, and started my PhD.

Here I am today, defending this PhD thesis, a dream that came true because of the many people who were there for me throughout the way.

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# Abstract

Higher education dropout has been considered a major concern for several researchers in the field of education around the World. Although different studies were carried out to deal with the topic, they all faced common limitations. This PhD thesis explores the twofold research conducted to investigate higher education dropout in Education studies at two of the main Catalan public universities. First, a review of the different theoretical perspectives that tackled dropout was carried out to combine the direct and indirect dropout predictors. Second, some research was conducted in the faculties of Education in the selected two Catalan public universities to investigate the antecedents of higher education dropout. The utilized instruments are document analysis, interviews and surveys. The findings were analyzed through the mixed method, and revealed that dissatisfaction from the program and academic failure are the most important antecedents of higher education dropout in education studies in Catalonia. This study discussion has lead to two models that dealt with the limitations of previous studies. One model projects the predictors of higher education dropout in a 5-layer figure called the "Dimensions of Academic Dropout" wheel and the second presents ways to institutions to support students and prevent dropout during the student´s study journey and it is called "Student Support Model for Higher Education Institutions".

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# INTRODUCTION

## 1.1 Research Justification

Higher education is considered the last step of formal education after the completion of high school. There is a huge controversy around the necessity and value of this degree (College Education, 2020). Although the investment is high for many students, the expected outcome is considered rewarding. Receiving a higher education certificate increases the chances to have more lifetime earnings than stopping at the high school level. Nowadays, the job market has become more demanding, employers are in continuous search of highly skilled talents that demonstrate proficiency in their field, knowledge in technological advancements, and expertise in soft skills. Through the journey of higher education, students acquire, experience, and practice different skill sets that would prepare them for the challenges of the job market. Furthermore, being a successful graduate increases the connection of students, thus the chances of finding a job and being active members of the community. Higher education prepares a student to select information, think, analyze, apply, communicate, and evaluate. Such a journey transforms an individual from an undergraduate to a potential distinguished and skilled candidate making higher education a valuable investment for students and families.

Being driven by the desire for learning and better career possibilities, students tend to select programs and universities based on their approach to teaching and learning in addition to the previous graduates´ feedback. Higher education institutions are thus, subject to intense competition in understanding the students´ expectations and meeting their needs. Nonetheless, the main predictor of students´ satisfaction in higher education institutions does not lie in attracting students to register but in maintaining

students to successfully finish their study programs and graduate. Dropout rates are considered as quality indicators for higher education institutions, they help in measuring the effectiveness of educational programs and institutional strategies. High dropout rates are costly for students, educational institutions, and society. Students lose the money they invested in their study programs, institutions´ ranking is affected by the decrease of study success rate, and droppers will cost taxpayers a lot of money as they are more likely to rely on the social programs of their society.

Therefore, one of the goals of the Europe 2020 strategy was to reach at least 40% of 30–34-year-old to complete their higher education (European Commission, 2015). The key approaches for this goal were to decrease dropout rates and increase study success (European Commission, 2015). Several national policies and measures were put into practice in European countries to reach this goal. The policies included, funding and financial support to institutions and students, access regulations of organizational policies for higher education institutions, implementation of quality assurance strategies through indicators as dropout rates and study success percentages, simulation of "success-oriented" initiatives to make higher education more flexible and avoid duplication of learning experiences, addressing time-to-degree by improving the matching between students and programs, changing in the degree structure to meet students demands, limiting study period to a mandatory plan, facilitating access to information about the institutions and programs, and implementing student support services to follow up students for academic, personal, and career choices (European Commission, 2015).

Spain was among the 35 European countries that placed decreasing dropout rates as an important topic on their policy agenda. Spain implemented different strategies to reach its goal including performance-based funding or agreements that rely on study success indicators of educational institutions, financial support for students through rewards and bonuses based on their continuous academic progress, and different fees for students who achieve their targets outstandingly. Studies have shown that some of the key challenges for Spain are, first, having high rates of early school dropout which negatively affects the employment outcomes that lead tertiary graduates to work in jobs that do not require their degrees. Second, the lack of support for teachers´ professional development. Third, the university system is mostly focused on internal stakeholders rather than the needs of the students and the labor market. And finally, the university funding procedure is based on enrolment numbers and not on performance. To cope with these challenges, in 2016, Spain has decided to modernize institutional governance and structure and give more autonomy to institutions to review their internal aspects. Furthermore, to strengthen the link between the institutions and the private sector, the government has set a plan to improve job training in education. Although all these strategies decreased dropout rates in Spain from 31.0% in 2011 to 21.4% in 2019, 2 out of 10 students still drop out from Spanish universities causing the state 974 million euros of an annual loss and failing to meet the requirement of Europe 2020 stating to decrease early leavers to 15% (Arce, Crespo, & Míguez-Álvarez, 2015). Spain is continuously facing challenges in dealing with dropout due to the lack of financing, the limited capabilities of companies in having interns, and the complicated bureaucratic process of internships (OECD, 2018). Nonetheless, on the positive side, Spain has managed in 2019 to have 47% of its

students complete their tertiary studies (including university, technical careers, and higher vocational training) as compared to the OECD average of 45% (OECD, 2020). As such, Spain has exceeded its national target of 44% for 2020 (Arce et al., 2015).

As a autonomous region in Spain, Catalonia has also taken some measures to increase study success among its inhabitants and decrease higher education dropout rates. From 2001 to 2016, significant improvement was noticed as the higher education general dropout rate decreased in Catalonia from 30.3% to 18%. However, in 2010, the average dropout rate from the general dropout percentage rate in Catalonia was 33.6% in Catalan public and semi-public universities according to AQU (Rodríguez-Gómez, Feixas, Gairín, & Muñoz, 2012, 2015; RodríguezGómez, Meneses, Gairin, Feixas, & Muṅoz, 2016). Catalonia's educational system was immensely affected by the economic crisis that Spain lived in. It has faced some budgetary constraints which hindered the staff turnover and the continuous search for new talents. Also, the budget provided by the Government of Catalonia to public universities increased 53.4% only compared to GDP which increased by 57.2% from 2001 to 2015 (AQU Catalunya, n.d.). And finally, the private funding of universities was not significant in Catalonia as in other countries, the average of grants in Catalonia was limited to 1,480 euros according to AGAUR report (University and Research Grants Management Agency) which was less than the mean cost of an undergraduate program is €2,123 (AQU Catalunya, n.d.). All these facts have limited the capabilities of Catalan public universities to implement strategies to decrease dropout rates and help students.

Several general limitations were also hindering the continuous improvement of higher education dropout rates. For example, the lack of a common method for calculating

attrition (Deary, Watson & Hogston, 2003; Glossop, 2001; Cook, 2010), the difficulty in determining the reasons why a student drop out of a program (Tinto, 1975; Deary et al., 2003; Dodge, Mitchell & Mensch, 2009), the difficulty to access those who have already dropped out of a program (Glossop, 2001), the weak inventories used to collect data from students (Deary et al., 2003), in addition to the inattention to possible relationships between factors that affect students trajectory. To address these difficulties, twofold research was carried out in two of the Catalan public universities. First, an evaluation of dropout literature and theories was conducted to induct the different dropout predictors and gather them in a five-layer model entitled the "Dimensions of Academic Dropout" wheel. The study investigates the antecedents of higher education dropout in the selected Catalan public universities by focusing on their faculties of Education to identify their main predictors of dropout. Second, the study identifies the prevention solutions implemented in the faculties to understand the gap and come up with some innovative strategies and advice to help in decreasing dropout rates.

Taking into consideration the drawbacks and limited studies on higher education dropout in Catalonia, the current research aims at identifying and analyzing the antecedents of higher education dropout and the current prevention strategies from the lens of faculty members and students. Studying the antecedents of higher education dropout is expected to give an insight into the main shortcomings of the educational institutions to, potentially, help in improving organization and practices. Consequently, the assessment of dropout antecedents will facilitate the strategic choices of institutions when selecting strategies to decrease dropout. Involving faculty

members and students will allow them to express their thoughts and needs based on their observations by being part of the educational institutions. Also, it will accumulate suggestions regarding strategies or practices that could be beneficial in decreasing higher education dropout.

## 1.2 Research Questions

This research aims to identify the general antecedents of higher education dropout and provide educational institutions with an overview of these factors to facilitate the selection and implementation of prevention strategies. The focus of the study is to examine the antecedents of higher education dropout in the context of the faculties of Education in Catalan public universities and to identify prevention solutions.

The research questions are grouped into two different conceptual categories, dropout antecedents and predictors, and prevention strategies.

### 1.2.1. Dropout Antecedents and Predictors

- **How can the theories and studies on higher education dropout be grouped to help in determining its reasons?**

Higher education dropout is an issue that has been discussed by several researchers throughout the years. Despite the widespread research, dropout characteristics and reasons were not identified due to lack of a unified definition of the concept and its confusion with voluntarily withdrawal and temporary stop out, and to the multiple theoretical models that aimed to explain the process of dropping out neglecting the variations between forms of dropout and levels of persistence. However, all this

research added new knowledge and different views towards the topic thus are considered useful material for this current research. This study wishes to review most theories and research that tackled higher education dropout to group them into different categories based on their main focus.

- **Based on the previous theories and studies, what are the main predictive items of dropout, how can they be distributed, and how can the connection between the different dropout factors be simplified and identified?**

Higher education dropout affects negatively on both students and institutions and is a very complicated issue to understand and solve. To lessen the social and economic costs of dropout, it is important to identify the different dropout predictors. Previous and current studies have shown that predictive tools suggested were focusing on one or only a few dropout predictors disregarding the other aspects that could lead to dropout. This study wishes to identify and collect the different dropout predictors mentioned in the literature review and to distribute them in different dimensions, this presents a general overview of all factors that might cause dropout to facilitate the selection and implementation of the right predictive tools and prevention strategies.

One of the main limitations of dropout studies is the inattention to the possible relation between factors that could lead to dropout. The decision of whether to dropout is the outcome of the interaction of different factors on several levels of the student´s life and educational journey. By projecting all dropout factors in one model, institutions may be able to identify the main predictors causing student´s dropout based on their longitudinal analysis and students´ backgrounds, thus specify the different forms of assistance and support. For this reason, this current research wishes to set a model that

could facilitate the exploration of the different connections of items that could lead to dropout thoughts.

- **What are the main antecedents of dropout in Education studies in Catalan public universities, and where are they placed on the "Dimensions of Academic Dropout" wheel?**

This study wishes to analyze the antecedents of higher education dropout in the faculties of Education in Catalan public universities to specify the main predictors that should be focused on from the institutional perspective.

### 1.2.2 Prevention Solutions

- **To what extent are the faculties if Education in public universities in Catalunya able to collect students´ data and have specific study success and dropout rates?**

The student data privacy protection law has been put in place in several countries which limited access to student´s history disabling the institutions from understanding the backgrounds of students. This protection law has also limited access to student inventories and academic performance. The institutions are required to be aware of the data collected and make sure not to share it without the student´s permission. The study wishes to provide institutions with a different way to approach students and understand their background to be able to support them throughout their studies without breaching any law. By doing so, institutions will also have more exact dropout and study success rates as they will be in control of information to identify who dropped out, transferred out, or stopped out.

- **What kind of strategies are implemented in Education faculties in Catalonia to follow up with students during their studies and prevent dropout, and how can we ameliorate them?**

  Numerous prevention and retention strategies used in different educational institutions all around the world have proven to be effective. As the study focuses on the faculties of education in Catalan public universities, it aims at exploring the different prevention strategies used and their effect. The study wishes to present a model to explain the process of interaction between the institution and the individual from the orientation process to the end of the student´s journey. By doing so, the study sheds light on the important stages in the educational process that need close follow-up and attention from the institution to prevent any thoughts of dropout. The outcome of this interaction could be a deception that could lead to dropout or transfer out active or passive persistence, or achievement.

  Based on the research questions discussed above, the research objectives are grouped into two categories.

- **General Objectives**

1- To identify the dimensions generating dropout in higher education

2- To design strategies to prevent dropout in higher education

- **Specific Objectives**

1- To provide a classification of the factors causing dropout in education studies.

2- To explore the strategies implemented by the faculties and universities to address these factors.

3- To set some guidelines to follow up students' trajectories.

4- To come up with, adapt, or update some innovative inclusion strategies to decrease dropout through either preventing it or redirecting it to transfer out.

# THEORETICAL FRAMEWORK

## 2.1 Different Conceptions of Dropout

Dropout is also known as attrition, withdrawal, and non-completion (European Commission &Culture, 2006; Owens, 2009) has been considered a major concern for several researchers in the field of education since it affects intensely the individual, educational institutions, and society (Sosu & Pheunpha, 2019). This phenomenon might occur any time during the study cycle; early learning stage, high school level, or tertiary education.

This study´s focus is on higher education dropout. The triggering question that the study intends to research aims at understanding why students would have dropout thoughts after investing in their time and mind before choosing a major and applying to any college.

This chapter serves as an introduction to the term "dropout" by presenting its different typologies and comparing several related terms.

### 2.1.1   Overview of Dropout Definition

The differences between the educational systems and their targets worldwide have led to an inconsistency in defining the universal concept of dropout. The National Center for Education Statistics (NCES) has unified many of these definitions by considering droppers as students who were enrolled in a school year but did not renew their enrollment the following year or students who left their studies before graduating with no evidence of being expelled, re-enrolled in any other institution or evidence of illness or death.

Within the general notion of dropout, higher education dropout has been defined as leaving university before completing a qualification (Cambridge English dictionary, n.d.). A concept that has been interchangeably used with attrition refers to the "departure from or delays in the successful completion of program requirements" (Ascend Learning, LLC, 2012). The index to measure university dropout or attrition is indicated by the ratio between enrollment and successful graduation (Cabrera, Tomás, Álvarez, & Gonzalez, 2006).

This definition of the dropout was further developed by the Spanish Ministry of Education including not only those who abandoned the university system and quit their learning program but also those who changed their field of interest, left their country to study abroad (Arce, Crespo & Míguez-Álvarez, 2015), or even stopped a program to start another in the same or different university (Cabrera et al., 2006).

This extension of the definition mistakenly merges cases of students that graduate in other communities, participate in exchange programs like Erasmus, or take a break for few years to experience life (Cabrera et al., 2006). Moreover, it includes controversial situations as quitting a major to start another, which is considered a failure of reaching academic objectives for the universities; whereas, for the students, it can be a new road to success.

Due to the complexity in the definition of dropout, universities tend to calculate the rates of dropout based on their definition of the term which might be linked to several criteria including the goals and perspectives of each student individually (Cabrera et al., 2006).

Hence, in the purpose of avoiding any future misconception, according to this study, higher education dropout includes students who registered in a course but did not enroll again during the coming two-course periods, so left intentionally or unintentionally their study program or their institution (Gairín, Triado, Feixas, Figuera, Aparicio-Chueca & Torrado, 2014). As for the mechanism through which students leave a major to start another or change institutions, it will be referred to as "transfer out" (Arce et al., 2015), which according to this study, is not categorized as an ultimate dropout case.

According to the Consortium for Research on Educational Access, Transitions and Equity (CREATE) (2010), dropout and dropout rates have different typologies. There are five types of dropout that are categorized between temporary or permanent.

Temporary dropout which includes "Sporadic Dropouts" caused due to financial problems, "Event Dropouts" caused by any unfortunate incidence whether at school with the teachers or administration or home with family members; and "Long-Term Dropout" caused by any reason and lasts for many years.

As for permanent dropout, it can be either "Unsettled" when students feel uncomfortable going back to school due to their age or fears or "Settled" when students choose working or acquiring a skill rather than studying (CREATE, 2010).

In different words, Yorke and Longden, (2008) considered the followings as the types of dropout to keep in mind: "voluntary, involuntary, temporary, permanent, initial, provisional, definite and the possible relationship (or not) between dropping out and academic failure, or dissatisfaction with the quality of the student's experience" (Gairín et al., 2014).

In addition to these distinctions among dropout types, another differentiation was made among dropout rates. Based on the Intercultural Development Research Association (2014), and the National Center for Education Statistics, Bonneau (2008) noted that the different sorts of dropout data can lead to calculating the following types of dropout rates:

1- Cohort Dropout Rate: the rate of students dropping out from a single group over some time due to transfer or personal problems or death.

2- Event Dropout Rate: the rate of students dropping out in one year from an institution or school or university.

3- Status Dropout Rate: the rate of students from a certain age group in a population dropping out without earning a degree regardless of the dropout time.

4- Attrition Rate: the rate of students with missing records between two periods of time.

### 2.1.2   Definition of Related Terms

After viewing the differences between the types and rates of dropout; the following table introduces by alphabetical order some important and related terms (Rodríguez-Gómez et al., 2012; Gairín et al., 2014) that might be used in the coming sections.

TABLE 1. *DEFINITIONS OF RELATED TERMS*

| Term | Definition | Researcher |
|---|---|---|
| **Academic Dismissals** | Students who were forced to withdraw due to grade performance | Tinto, 1975 |
| **A dropout** | An individual aged between 18 and 24 with at lower secondary degree and not in further education or training | Felgueroso, Gutiérrez – Domènech and Jiménez-Martín, 2013 |
| **Attrition** | "Departure from or delay in the successful completion of program requirements." | Ascend Learning, LLC, 2012 |

| | | |
|---|---|---|
| **College Persisters** | "Students with poor academic qualifications but moderately high commitment tended to persist in college till completion or until forced to withdraw for academic reasons (i.e. academic dismissal)." | Tinto, 1975 |
| **Study Completion or Success** | Students who successfully completed their study program with a degree | European Commission, 2015 |
| **Desertion** | "A situation faced by a student when he aspires and fails to complete his educational project." | As cited in Suárez-Montes, Díaz-Subieta, 2015 |
| **Discontinuity** | "A setback in one's academic career and places one at risk for dropout, even if the student transfers to a different school." | As cited in Arria, Caldeira, Vincent, Winick, Baron, and Ogrady, 2013 |
| **Dropout** | Leaving studies permanently with no intentions to return.<br><br>"A student voluntary drop out is anyone who withdraws from the institution without completing the academic program in which the student was enrolled" | Cambridge English dictionary, n.d<br><br>Tinto, 1983 |
| **Goal Commitment** | "A reflection of a multidimensional process of interaction between the individual, his family, and his prior experiences in schooling." | Tinto, 1975 |
| **Inclusion** | Providing unbiased, valuable experiences to all students equally | US Department of Education, 2016 |
| **Non-completion** | Students who did not complete at least one undergraduate degree within 6 calendar years of first enrollment. | Aulck, Velagapudi, Blumenstock, West, 2016<br><br>Owen, 2009 |
| **Persistence** | Student efforts to accomplish their studies. | Hagedorn, 2005 as cited in Wyrick, 2014<br>Hartly, 2011 as cited in Gentry 2014 |
| **Retention** | University efforts to maintain students. | Hagedorn, 2005 as cited in Wyrick, 2014 |
| **Study Success** | "Comprises all major achievements of students in the higher education system, including | European Commission, 2015 |

| | | |
|---|---|---|
| | dropout/persistence, completion of a degree, and time-to-degree." | |
| | "Student success is defined as academic achievement, engagement in educationally purposeful activities, satisfaction, acquisition of desired knowledge, skills and competencies, persistence, attainment of educational objectives, and postcollege performance." | Kuh, Kinzie, Buckley, Bridges, and Hayek, 2006 |
| **Stopout** | Putting the education on hold with the intention to return and complete a degree. | Domonell, 2014 |
| **Transfer Out/Transfers** | Leaving a major/ students who leave a major in the purpose of re-enrolling in another one in the same which can be called "Variation" or another university for the next two years. | Arce et al., 2015<br><br>Study Group Australia Higher Education Division, 2017 |
| **Voluntary Withdrawal or dropout /Withdrawals** | Voluntary withdrawal "implies a decision on the part of the individual" | Tinto, 1973 |
| | "Students with solid academic competence but a moderately low commitment to college completion tended to withdraw voluntarily from college often to transfer to another institution or re-enroll at the same institution at a later date (i.e. stopout)." | Tinto, 1973 |
| | "Students with both low commitments to college completion and moderately law academic competence tended to withdraw from college and not transfer or re-enroll at a later date." (i.e. dropout) | Tinto, 1973 |
| | Voluntary withdrawal takes place when there is a mismatch between the skills and abilities of individuals and the level of demand of institutions. | Tinto, 1993 |
| | "Withdrawal is the formal process whereby a student's studies are halted, and their enrolment is removed from one or all subjects (and in that case their course). A | Study Group Australia Higher Education Division, 2017 |

| | withdrawal can only be requested by a student and can be for withdrawal from a subject or from the entire course." Voluntary withdrawal is associated with the relationship between the individual and the institution's intellectual and social environment. | |
|---|---|---|

It is essential to mention that although the definitions presented in Table 1 are recognized worldwide; they may vary between researchers depending on their interpretation based on the context of their work, its objectives, and methods (Gairín et al, 2014).

### 2.1.3   Synthesis

For the biggest parts of the past and current centuries, researchers have been exploring the concept of dropout aiming to identify and understand the different behaviors of students towards their education and institutions. Their work has been of huge importance considering that dropout rates work as Key Performance Indicators (KPI) for educational institutions and systems (Rodríguez-Gómez et al., 2012).

The definitions explored previously allow us to place the terms "dropout", "transfer out", and "stop out" under the umbrellas of the terms "attrition" or "withdrawal" which include:

1. The voluntary or involuntary departure from a study program with no intention to return (dropout).

2. The departure or dropout from a study program or institution to re-enroll in another one (transfer out)

3. The delay of a study program to restart it later (stopout).

It is hoped that this study will provide a deeper understanding of the complex processes that lead to students' voluntary or involuntary dropout from a study program or a university to find the right prevention solutions that help in maintaining students or assisting them in transferring out.

## 2.2 Theories of Dropout

This chapter discusses the various factors influencing students' withdrawal from higher education institutions based on the theories of some main researchers in the field. It aims at answering the first research questions of this study: *How can the theories and studies on higher education dropout be grouped to help in determining its reasons?*

Chen (2008) has categorized the theories of dropout into five; psychological related to individual features, sociological and economic caused by exterior reasons, organizational affected by institutions, and interactionalist combining both individual and environmental elements. The section below uses the same categories of Chen (2008) to project the main theories of dropout in addition to some of the relevant studies.

### 2.2.1 Psychological Theories

Bean and Eaton (2001) related students' persistence in higher education to four different theories; the attitude-behavior theory which focuses on individual traits as maturity level, the coping behavioral approach theory which depends on adaptation levels in new surroundings, self-efficacy theory that reflects the students' self-

confidence and views towards their intellectual capabilities and abilities through tackling different circumstances and challenges and through showing high study performance that can prevent dropping out after the failing semester, and the attribution theory which depends on the student's ability to be motivated and controlled based on the "locus of control". This locus of control can be internal when students learn from their previous experiences and associate them with their preparation which raises their motivation to work harder in the future and succeed, or external when students attribute their success or failure to fate and chance, thus do not make any personal efforts to improve, which leads to dropout (Retention Practices, 2001; Kuh et al., 2006). All of the aforementioned theories, study the effect of psychological factors on the students' choices of persisting or departing from the university (Chen, 2008). Bean and Eaton (2001) viewed dropout or retention decisions are merely individual decisions taken depending on the psychological state of students (Retention Practices, 2001).

FIGURE 1. *BEAN AND EATON (2001) PSYCHOLOGICAL MODEL OF STUDENTS'*
*RETENTION (RETENTION PRACTICES, 2001, P. 76)*
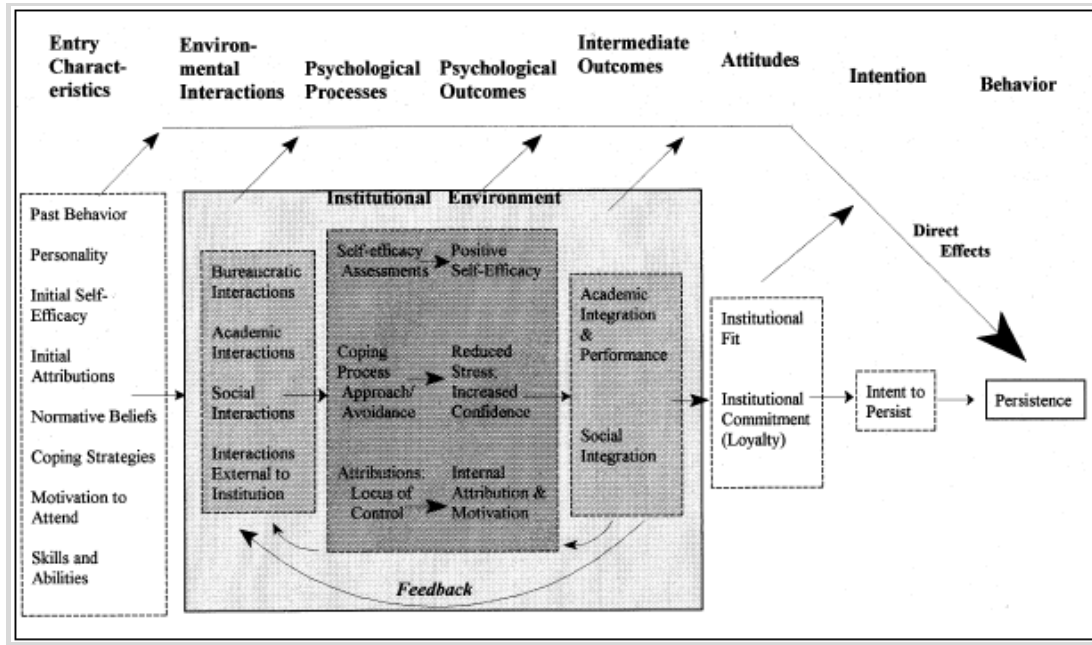


Bean and Eaton´s (2001) model designates some pre-entry psychological individual characteristics that students already have when entering college due to their prior teenage experiences; the way students perceive their self-esteem and efficacy affect them greatly at the higher education stage. Then comes their interaction with their environment which includes the administrative support the university offers, their relation with the academic body, and their contact with peers and staff in general (Retention Practices, 2001). Throughout these processes, students pass in new psychological procedures with their surroundings and therefore build new psychological characteristics that can either lead to academic and social integration, in addition to motivation which consequently leads to persistence and loyalty towards the institution, or deteriorates students' self-perception of efficacy and confidence and then leads to a personal decision of dropping out (Retention Practices, 2001).

On a similar stand, Kuh et al. (2006) cited Dweck's theory (2000) which mentions two types of views that students can carry towards themselves; entity view or incremental view. Students who carry the first view have an external locus of control and thus believe that intelligence is a set feature and no efforts can improve it; on the contrary, students with an incremental view, have an internal locus of control and believe in improving their intelligence through challenging tasks and continuous learning experiences (Kuh et al., 2006).

Most psychological theories consider that students have their prejudgments and expectations on how to manage their time at university, and how the relationships with their surroundings and institution should be; and any disappointment in these areas can affect their behavior, attitude, in addition to their social and academic performance which can lead to dropout (Kuh et al., 2006, Khan, 2017).

### 2.2.2 Sociological and Cultural Theories

The sociological factors were discussed in three different theories; the conflict theory by Clark (1960), the social reproduction theory by Bourdieu (1973, 1977), and the social attainment theory discussed by Duncan et al. (1972) and Featherman and Hauser (1978) (Chen, 2008).

Côté and Furlong (2016) examined Clark's (1960) theory that explores the relationship between the educational and involvement achievements of humans and their socioeconomic status, ethnoreligious background, gender, and geographical location, thus highlights the social inequalities when it comes to education. This theory focuses on some specific "hierarchical institutional arrangements", in which some institutions were indirectly preparing minority and misrepresented students to work for capitalists

by deceiving them through offering some basic education that can neither help them to enter university later on nor to have a good economic and social status in the society (Côté et al., 2016).

Similarly, the reproduction theory of Bourdieu (1977-1984) considered that the educational system reflects the dominant social class; students who come from dominant classes in the society can get integrated easily and succeed in the university due to shared values, customs, and tastes between their families and the institutions which can reflect positively on their academic outcomes and occupations in opposite to students from misrepresented families who can easily drop out due to cultural differences (Côté et al., 2016). Besides, this theory tackles the importance of social "connections" from which one acquires knowledge and information regarding academic institutions and different majors, and thus can make the right decisions when choosing future targets; students coming from families with rich connections have enough information to narrow their academic choices and choose wisely in opposite to those coming from humble families that can make wrong choices when choosing a major or an institution which can also lead to dropout (Côté et al., 2016). Moreover, Kuh et al. (2006) and Côté et al. (2016) coined the term "Habitus" of Bourdieu and Passeron (1997) to refer to the effect students' previous experiences have on their actions, choices, and academic and personal targets; "history turned into nature" when one's previous tendencies and actions become a habit for future decisions from which comes the students' voluntary decision of perseverance or dropout. On a similar stand, the social attainment theory of Blau and Duncan (1967), considered that the educational background of the family members especially the father and their prestigious jobs affects the educational choice of individuals and their first occupation

(Côté et al., 2016). Therefore, based on the sociological factors, a student's status achievement is dependent on many features that highlight the relationship between inequalities among social classes and education; just as Tinto (1993) mentioned, the position of individuals and institutions in the society's rankings is essential in dropout choices due to fact that social, economic or ethnical pressure can affect students' selections.

For further development, in later years, Kuh et al. (2006) referred to Kenny and Striker (1996), in addition to Chamberlain (2005), who agreed with previous sociological theories regarding the assumption that "social adjustment and integration" for minority students are mostly influenced by their families rather than friends and their integration in social groups is more difficult than one of the white students. Also, historical underrepresentation of some minorities affects negatively the integration process of some new generation students, especially that several of "institutional norms" contradict the values and beliefs of these students' families or origins which can lead to alienation (Devis, 2020) and dropout if students are not able to integrate and accept these differences. In such cases, the responsibility must be divided among students and institutions to make the adaptation process easy, fast and successful and to decrease the differences between the two environments: home and educational institution (Kuh et al., 2006).

Tuner (1994) compared the minority students' experience in some institutions to being a guest in another's house, where one can never feel extremely comfortable or fully integrated; if not well-supported by staff and peers, minority students will never feel at ease. First-generation students coming from minority groups or low-income white

families experience similar challenges and have to live up to the same pressure to adapt successfully by re-questioning their families' beliefs and accepting new ones (Kuh et al., 2006).

In addition, cultural diversity as race, ethnicity, native language, gender, social suffering (Larsen, Sommersel, & Larsen, 2013; Gentry, 2014; Hasbun, Araya, & Villalon, 2016; Chetty, Hendren, Jones, & Porter, 2018) and many more have been considered as major causes of dropout for several researchers such as King (2000) who noticed that white upper and middle-class men and women are more likely to graduate than African American minorities and poor ones. On the opposite stand, many other researchers as Swadener (1995) and Herbert and Reis (1999), considered cultural diversity as a pushing factor for students to achieve more.

Furthermore, De Wittee, Cabus, Thyssen, Groot, and den Brink (2013) considered that early school leaving has a direct influence on college dropout. Pascarella and Terenzini (2005) believed that postsecondary planning has to start from the 8th grade and must be supported by parental motivation and encouragement no matter the social class, to raise self-confidence in students' abilities, develop skills, and set success as the main target especially that several high school teachers can affect students negatively due to their pessimistic views and prejudgments of students' abilities based on class performance and behaviors as mentioned by the US Department of Education (2004).

Both sociological and cultural factors regard the process of dropout as the consequence of a large "social stratification" and highlight the effect social factors have on educational decisions; nevertheless, the focus on sociological and cultural factors must

not deviate our attention from psychological, organizational, and other main factors that also have a huge impact on the students' dropout decision (Smart, Ed., 2008).

### 2.2.3   Organizational Theories

Organizational factors were tackled by two main models that related dropout to the turnover and demand in work establishments (Chen, 2008); the causal model of student attrition by Bean (1980, 1983) and the model of turnover by Price (1977).

Bean's attrition theory "beliefs shape attitudes, attitudes shape behaviors, and behaviors signal intents" lead to students' experience with the institution and views of its rules, objectivity, and staff behavior that shape their attitude towards it which in itself affect their feeling of belonging and their decision of dropout.  In a review of Bean and Eaton (2001) psychological theory, Retention Practices (2001) concluded that students' attitudes towards their learning program or institutions are based on their previous experiences with several organizations before entering college, hence the importance of the institutional staff from which not only professionalism is required but also a positive attitude when delivering the services because otherwise, students' feelings towards the institution can be affected negatively which lead to dropout.

The second theory that dealt with organizational factors is the turnover theory of Price (1977) which was mainly tackling employees' satisfaction towards their job and institution (as cited in Holtom, Mitchell, Lee & Eberly, 2008). Similarly, academic institutions and students' satisfaction can affect students' academic decisions. Satisfaction with the organization and its size, the peers, the faculty interaction, the available resources, the relationship between institutions and workplaces, all have a powerful effect on students' dropout decision and behavior (Berger & Milem, 2000;

Schultz., 2020). Size affects the students' enrollment decision depending on their previous observation of the institution (Kuh et al., 2006; Chen, 2008); usually, small institutions are more likely to attract students due to their consistent attention to each learner (Lavrentsova, 2019). Regarding big-size institutions, students living on campus have an interesting experience and are more satisfied and integrated socially and academically than those living elsewhere (Kuh et al., 2006; Jones, 2013). Structural campus diversity allows minority and majority students from diverse races or ethnicities to build positive relationships and get in contact with students from different cultural backgrounds which increase their will to graduate, help them to grow open-mindedly through accepting others, raise their readiness to actively collaborate with others, and leave them with remarkable college experiences eliminating the danger of dropping out (Gurin, 1999; Nariba, 2019; Winkle-Wagner & Locks, 2020).

Therefore, the organization of an institution defined by Berger (2002) as "the patterns and processes of behaviors exhibited by administrators on campus" has a considerable effect on students. Kuh et al. (2006) defined two types of colleges that have a negative influence on students' success, those "externally oriented" and those with a "collegial ethos". Besides, a dropout from an institution can be caused by some obstructs in the academic process due to the lack of advising or inflexible scheduling which makes it impossible for students to graduate on time so they lose motivation.

Another important theory that deals with the factors related to institutions is the organizational theory. It considers that the matching between the academic programs, policies, target, mission, and purpose of both institution and students allows students persistence (Kuh et al., 2006; Suhre et al., 2007).

Organizational factors believe that students' success is related to some of the organization's key factors like policies, size (Diem & Wolter, 2019), history, staff, etc. There must be a positive relationship between organization and individual to create a sort of institutional satisfaction that can lead to perseverance in studies, a sense of belonging in students, and a decrease in dropout chances (Behr, Giese, Teguim Kamdjou, Theune, 2020).

### 2.2.4   Interactionalist Theories

Many theories throughout time dealt with the interactionalist factors that lead to dropout; it all started with Durkheim (1951) suicide model, then came Rootman's (1972) "role socialization" and "personal- role fit" models, followed by Spady's theoretical model (1975), etc. to be all combined later on in Tinto's (1992-1993) attrition model which developed all of them and related students' persistence to dynamic connections between individuals, their prior experiences and individual targets from one side and the institutional body from students to staff from another side (Chen,2008).

In this section, the two main models that shaped the interactionalist factors, Durkheim's (1951) suicide model and Tinto's (1993) attrition model will be described and compared based on Tinto's (1993).

In his book, Tinto (1993) found an interesting connection between Durkheim's (1951) analysis of the different types of suicide in society and the application and examination of dropout between different institutions and within institutions over time, this connection will be projected in the following table.

**TABLE 2.** *THE RELATION BETWEEN THE SUICIDE THEORY OF DURKHEIM (1951) AND THE ATTRITION THEORY OF TINTO (1993) (TINTO, 1993, PP. 101-104)*

| Type of Suicide | Description according to Durkheim (1951) as related to social suicide | Description according to Tinto (1993) as related to academic suicide |
|---|---|---|
| **Altruistic** | Killing oneself is morally acceptable in certain societies in certain institutions. | Some institution ideologies or subcultures lead to students' departure. |
| **Anomic** | Abusing norms, a temporary disturbance of the normal conditions of a society, and a collapse of the normal social and intellectual pledges which bond individuals and form a society such as in the case of wars. | The existence of some troublesome forces on campus as riots obstruct the daily operations in the institution and weaken the relationship between individuals and institutions. |
| **Fatalistic** | Excessive norms and control disciplines which avoid one from building his/her future. | Highly structured institutions force some specific behavioral and intellectual norms on students. |
| **Egotistical** | Inability to the individual to share values and integrate successfully within a community leads to "intellectual isolation, deviancy, and insufficient personal relationships". | It is a voluntary dropout due to the social and intellectual communities that form the college and the inability of a student to integrate. |

Despite some main contextual differences between the two theories such as the temporary stay of a student in a college in opposite to the permanent stay of most humans in their societies and the homogeneous structure of most societies which cannot be found in colleges (Tinto, 1993), Tinto's model of students' attrition (1993) was able to change the descriptive model of Durkheim to a theory of individual behavior and combine all the previously mentioned theories to make up a "sociopsychological interplay" between students' traits (skills, education, intentions, and commitments) and the challenges waiting for them at university (psychological, social and organizational) and the surrounding environment; the stronger the social and intellectual integration is, the less is the dropout risk as seen in the following figure (Tinto, 1993).

**FIGURE 2.** *A LONGITUDINAL MODEL OF INSTITUTIONAL DEPARTURE (TINTO, 1993, P. 114)*
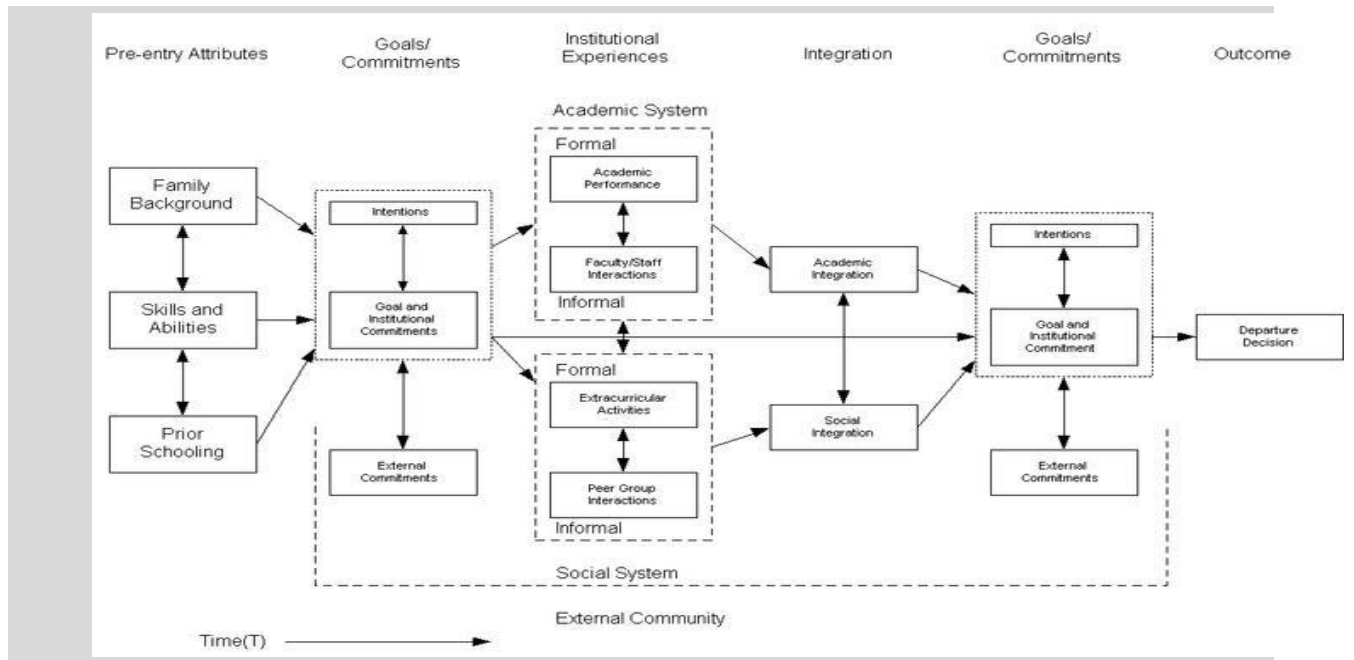


Tinto's model in figure 2 reflects how the interaction and relationships between individuals, educational and societal structures of the organizations, and societies can lead to students' dropout or retention behaviors (Tinto, 1993). The model reflects Tinto's definition of attrition as "a longitudinal process of interactions between the individual and the academic and social systems of the college during which a person's experiences in those systems…continually modify his goals and institutional commitments in ways which lead to persistence and/or to varying forms of dropout" (Ascend Learning, LLC, 2012).

According to Tinto (1993), a student must pass through three stages to reach adaptation: separation, transition, and interaction. Separating from family members and friends, transiting from previous cultural aspects of life to new ones, and interacting with new people to adopt new values and adapt to the new environment;

dropout takes place when students are not able to survive outside their comfort zone throughout this separation process. Tinto's model has been the main interest of several researchers when tackling the topic of dropouts (Titus, 2004; Chen, 2008; Hartley, 2011) as it related students' dropout to two main failures through their higher education path; one in their social life and the other in their academic trajectory. This relation raised awareness on the importance of integrating psychological, social, and organizational policies to highlight the importance of interactive dynamism between students, peers, and environment, and thus, diminish dropout by supporting students at risk and relieving them from estrangement (Gentry, 2014). Students' integration is based on the dynamic relationships between the students and their surroundings; the academic integration level of students can be measured by grades, major choice, and program satisfaction (Suhre, Jansen, & Harskamp, 2007); whereas the social integration depends on the peer-to-peer and group interactions (Kuh et al., 2006).

Tinto's notion was widely verified by many researchers who found that everything surrounding students contributes to their integration and persistence in educational institutions and that to attain their goals and achieve college successfully, students should be able to manage their external and academic commitments, personal attributes, interactive experiences, in addition to financial resources.

### 2.2.5 Economic Theories

Two main theories discussed the economic factors that lead to dropout; the human capital theory of Becker (1964), Schultz/Nelson-Phelps (1966-1967), Bowles-Gintis (1976) and Gardner (1983), and Radner and Miller's (1975) demand theory (Chen, 2008). The first considers education (knowledge, critical thinking, lifelong learning,

etc.) as one of the main human capital investment and as economically beneficial to individuals who are concerned about their future earning, job, and life quality; while the other focuses on the direct influence both tuition fee and financial assistance have on student's registration and persistence in tertiary education (Kuh et al., 2006). The decision to invest money to carry out university studies is an economic activity based on one's financial abilities, in addition to the degree cost and expected future profits (Maman & Rosenhek, 2020); which makes any financial help offered to students, decrease the dropout rate (Chen, 2008).

Cabrera et al. (1992) consider that financial assistance combined with students' expectations and their relations with their surroundings from organization to peers and professors affect directly students' persistence and provide a reliable foundation for need-based public funding (Chen, 2008; Gentry, 2014). Christenson, Reschly, and Wylie (2000) and Hasbun, et al. (2016) connected dropout to the financial status of students; the increase in the university costs, the unemployment, the dependence on public assistance or the loss of it, the single parenthood, and the political and social indifference might all lead to delinquency (Jarjoura, 1996).

From another perspective, financial independence can also cause dropout like the case of Argentina (Kelly,2013); students tend to leave their education to start working and earning money; or when employed, they drop out to maintain their jobs. Students from good socioeconomic backgrounds have more chances to succeed throughout their school and university due to the advantages and support they can get (Finkel & Barañano, 2014; Romero, Riggs, & Ruggero, 2015).

The majority of students according to Johnson (2009), struggle to financially support their education and have a decent life at the same time, so end up dropping out of college; the lack of financial assistance whether from parents or state is one of the main reasons of dropping out from university.

Financial factors have proven to be essential for endurance during one's educational pathway and completion of a degree since financial necessity can obstruct one's education for the search of work and survival (Arendt, 2012).

## 2.2.6    Synthesis

Influenced by Chen (2008), the study categorizes the theories influencing dropout into five; psychological, sociological and cultural, organizational, interactionalist, and economic. Several researchers considered that the theories previously shared are still incomplete and need further elaboration.

Tinto (1993), saw that the psychological theories exclude the external factors' effects on dropout oppositely to sociological ones that neglect the psychological forces. Moreover, very few and undeveloped are the theories relating dropout factors to institutions and organizations and examining their relationship; without neglecting the fact that such theories are more concerned about the general effect dropout has on the institutions rather than focusing on individuals (Chen, 2008), and that most institutional problems are ambiguous and unpredictable due to several factors including operational obstacles and measures which makes it difficult to spot the relation between the structure of an institutions and student dropout.

Regarding the internationalist theories; Nora (1987) and St. John et al. (2000) considered that these theories are based on insufficient experiments and neglect financial effects. Kuh et al. (2006) also considered Tinto's theory definition as insufficient and methodologically inconsistent because it has diffident experimental studies and its surveys are unable to capture its complexities.

Although these theories have been criticized, they had and still have a very important role in the identification of dropout factors to decrease the dropout rate worldwide.

## 2.3 The Predictors of Dropout

Christenson (2008) considered students' engagement as "multidimensional", combining personal and behavioral traits in addition to intellectual capabilities; it is the outcome of the relation between family, institution, surrounding humans, community, and students' expectations. In their turn, Hirshy et al. (2011) distinguished between two different types of students' characteristics that can help predict dropout: stable and malleable. Stable ones including all the below predictors from "socio-demographic attributes" to academic readiness and students' view to commitments towards their surroundings, and malleable ones comprising "student dispositions and skills" and "educational and employment goals and intentions" (Ascend Learning, LCC, 2012).

Following the main theories of dropout, this chapter projects dropout predictors that can be seen throughout students' trajectory in university starting from the first semester and that can help in identifying students at risk and anticipating some prevention solutions.

## 2.3.1  Personal Predictors

According to the National Survey of Student Engagement- NSSE (2005), a quarter of college students are first-generation, most of them were from minority groups whose parents did not even manage to finish high school; therefore, most of these students have less family comprehension and support regarding education and are unaware of the academic and social challenges waiting for them at college life thus, according to Cejda and Kaylor (2001), they need more encouragement, orientation, turorial action (Olmos-Rueda, 2021), from the institutions than most students that come from educated families to prevent them from being subject to dropping out. In addition to first-generation students (Ewell, 2010), students with adult responsibilities as full-time work or child care also need follow-up and attention (Johnson, 2009; Kehm, Larsen, & Sommersel, 2019). However, although these predictors may lead students to drop out, school intervention is only possible and needed with students at high-risk and not with all demographically similar cases.

## 2.3.2 Psychological Predictors

The psychological state of students can also be predicted through the investigation of several aspects as students' intentions, motivation, and integration with the environment, in addition to students' behavior and conduct during their classes or their obvious use of drug material (Gentry, 2014) or their history with juvenile Crime or behavioral problems (Jarjoura, 1996). Another individual predictor that can be used to evaluate the student's psychological state and integration problems is ethnicity (CREATE, 2010; Byoraz et al.,2013; Harden-Moore, 2019), in some cases, being ethnically different can cause devastating "posttraumatic stress disorder (PTSD)"

(Gentry, 2014). As for stress in general, it is a psychological state that results due to several factors that arouse emotions in students and can affect their work negatively from which the institution's importance of interfering once a student has a breakdown (Zajacova, Lynch, & Espenshade, 2005; Hartley, 2011 as cited in Gentry, 2014).

### 2.3.3 Academic Predictors

Self-efficacy, which is the way students perceive and evaluate their competencies to work harder, persevere, and be motivated to acquire and develop skills and knowledge to reach their goals, can be evaluated from the students' presentations, papers, exams, and grades (Quadri & Kalyankar, 2010); according to Allen and Robbins (2008) and Aulck et al. (2016), the first transcript of the first term of the first year can work as a precise college dropout predictor (Gentry, 2014). Usually, students with high self-confidence and stronger self-efficacy, control their emotions of stress and view new tasks as challenges; therefore, work on their skills to succeed in achieving goals and gaining high grades which makes training in "self-efficacy and stress-management" beneficial for university students; adding accumulated credits as a new dropout predictor (Zajacova et al., 2005). Moreover, students who usually transfer from one institution to another are less likely to get involved in new institutions socially or academically, thus need more attention than their peers (Kuh et al., 2006).

Besides, grades and class performance are very important in predicting students who are passing in tough situations during their school years and who are in danger (Gentry, 2014; Hasbun et al., 2016). Students from different backgrounds who were well-prepared academically in high school and graduated with good grades are usually

expected to graduate successfully in college oppositely with those with poor high school education (Páramo, Araújo, Vacas, Almeida, & González, 2017).

### 2.3.4 Engagement Predictors

In a study focused on 4840 students from the fields of Engineering and Business in Chile; Hasbun et al. (2016) found that extracurricular activities are also effective predictors of dropout. Hasbun et al. (2016), focused on their observations on two types of extracurricular activities; graded ones and mandatory ones with no credits earned such as leadership workshops and physical activities. The researchers expected that the engagement of students in such activities can predict school dropout since dropping out from any of these courses is an indicator of "behavioral proxy" and disengagement tendencies. Throughout their decision tree algorithm, they observed that students who have 68.33% or less efficiency in sports courses are more likely to drop out, assuring their belief that students dropping out from mandatory non-graded extracurricular activities were easily dropping out also from school, and such data can help in depicting students with a tendency of dropping out from the first semester. Similarly, students refusing to get involved in co-curricular activities or having a hard time being integrated socially into university groups have more tendency to drop out from their first academic year (Reschly, 2020)

### 2.3.5  Synthesis

This section has projected the different predictors that would allow an institution to prevent dropout through observing different personal traits, behavioral attitudes, and the intellectual abilities of students. Personal, psychological, academic, and

engagement predictors of higher education dropout could help in maintaining students in university if spotted at the right time and dealt with in the right way.

## 2.4 Practiced Prevention Strategies

Dropping out means empty seats in universities which consequently leads to the lack of highly skilled qualified workers (Gillis, 2007; Ascend Learning, 2012). In an attempt to solve this problem, several policies as "No Child Left Behind Act" (2001), "Lisbon 2000" and "Europe 2020" were set in the purpose of decreasing the percentage of dropout and finding some solutions.

Throughout this chapter, some practiced financial, psychological, and organizational programs and strategies that many states and faculties implemented to minimize the number of students dropping out will be viewed and analyzed.

### 2.4.1 Financial Assistance

Financial assistance can decrease the dropout rate in low-income and minority families who suffer to pay for their education. Investment in education is important to individuals and society as it decreases the inequalities between humans. Several countries as the USA have decided to financially support students. 3 billion dollars were spent by the American state governments to decrease dropout, help and retain students to achieve their degrees, and increase the workforce qualifications for economic purposes (Ascend learning-LLC, 2012). Although offering financial aid for students is a positive step towards decreasing dropout, the distribution of this aid has to be well-managed to provide equal chances. Offering financial aid through the forms

of loans, grants, and work-study for students regardless of their economic status causes a disproportionate distribution of merit. Financial aid policies should keep in mind that poor families, in addition to immigrants are more concerned about fees and unable to afford loans like rich and well-represented families. Dealing with financial aid identically with all students without considering their "socioeconomic" difference is inappropriate and could lead to dropout. According to Paulsen and St. John (2002), grants are the best option for students from weak socio-economic backgrounds to persevere in theirs.

Chen (2008) suggested a new approach for distributing financial aid among students and improving financial policies; it includes "psychological, sociological, organizational, interactionalist perspectives, human capital and demand theories" in addition to "liquidity constraints", "price elasticity" and "debt aversion". The last three new concepts, meaning respectively the "access to liquidity" and borrowing money, the continuous changes in university fees, and the fear of debt. All these concepts constitute sensitive issues to minorities from different racial or ethnic backgrounds (Springstead & Wislon, 2000) and low-family income students, hence the importance of examining the type of aid offered about its recipient's background and financial status before suggesting it (European Commission, 2018).

Another type of financial support includes financial rewards or sanctions to change the behavior of students and/or institutions towards study success and to motivate students and institutions to improve their success rates (European Commission, 2015, 2018).

## 2.4.2   Psychological Assistance

One of several preventive psychological theories to decrease the dropout rate is Check and Connect of Christenson and Reschly (2010). This theory stresses the importance of building strong relations between students, family, and institutions through the intervention of a mentor for two whole years to endorse student success and engagement. Once, a student is considered at risk due to some environmental predictors, a mentor is assigned to follow-up with him/her regularly through collecting school data to enhance skills, helping in solving problems, and collaborating with the family (Christenson et al., 2012).

Check and Connect proved to have a positive effect on school and high school students due to the long-term presence and role of mentors. Encouraging students to work harder, helping them to solve their problems and self-evaluate their work, supporting them morally, and motivating them to persevere through believing in them demonstrated that continuous intervention in students' life is necessary to students' retention and success (Gentry, 2014).

A similar practice is mentoring programs at the university level. According to the studies, planned mentoring provides some specific students with a mentor that supports students to adapt and integrate, and acts as a source of reliable information and reinforcement especially for alienated students who need assistance to open up to their environment (Tanael, 2012). Mentors are also able to affect strongly students with problematic behaviors, liberate them psychologically to move forward on all levels regardless of their surroundings, and enhance their self-confidence which allows them to experience life on campus positively and succeed socially and academically

(Gentry, 2014). Psychological assistance to students helps them surpass the emotional challenges during their university years thus decreases dropout.

### 2.4.3 Institutional Assistance

Ongoing orientation and advising programs allow students to think of their academic abilities before registering in an institution, and once enrolled, they help them be more integrated socially and committed academically (Hanover Research, 2014). The role of high-quality advising and professional advisors as necessary and crucial in the academic life of first-year students who can be hesitating towards their major, unaware of the importance of planning, alien to the academic support the institution offers, and questioning their educational program; such programs can help in answering their inquiries, provide them with the necessary knowledge, and affect positively their view and relations with the institution during all their academic years towards (Kuh et al., 2006).

Additionally, Service-learning, in an attempt to indorse students' growth, knowledge, and practice what they learn is also viewed as a successful prevention program (Retention Practices, 2001); universities offer the opportunity to students to take part in programs at local or foreign institutions to help and support humans and communities. Service-learning affects students civically, emotionally, academically, cognitively, personally, and culturally (Retention Practices, 2001). Throughout the process, students gain new skills to solve problems that they might face throughout their university life, they learn how to cope and survive during stressful situations, they become more aware of the value and importance of individuals in improving

communities, and they meet people with similar prospects which makes them more integrated and more focused academically (Yue & Hart, 2017).

Another program that combines both social and academic features of institutions and that leads to students' retention is Learning Communities/Freshman Interest Groups (FIG). When students register together in a course and work on several common topics that interest them as in the case of FIG, they start building strong relationships throughout assisting and motivating one another academically and socially and they become influenced by others to believe in themselves and work harder towards their goals (Mosley, 2018). Learning communities promote in students personal, professional, and social growth and general knowledge and satisfaction which have a positive effect on students' persistence and performance-proven (Kuh et al., 2006).

In addition to the previous programs, Freshman Orientation Seminars and training workshops have also an important role in decreasing higher education dropout especially during the first year (Retention Practices, 2001). Seminars take place at the beginning of the 1st semester for newcomers and thus introduce them to all the aspects of the university from administration to support offices that can provide them with necessary help; due to such seminars, students become more self-confident, less-stressed, and more at ease with their surroundings. Training workshops help students acquire new skills and become part of a newly formed group in which they can share and discuss their problems and work strategies through which they learn how to govern their college journey (Kishta, 2019). NSSE (2005) and Carstens (2000) viewed that first-year students who attended the first-year seminar showed greater motivation, academic efforts, personal love for challenges, active collaboration in classes, faculty

interaction, sense of belonging, and positive integration for their whole academic pathway more than those who did not attend this seminar.

Likewise, Precollege Encouragement Programs can raise the awareness of high school students especially first-generation college students and middle- and lower-class ones on the importance of education and provide them with the necessary information and assistance they need at this stage (Paoline, Terrill, & Rossler, 2015).

 "Precollege and ongoing orientation, transition courses, first-year seminars, learning communities, intrusive advising, tutoring and peer tutoring, supplemental instruction, study groups, summer bridge programs, study skills workshops, mentoring, student-support groups, student-faculty research, and senior capstone projects", are all important to maintain students and prevent them from dropping out; however, these programs need to be well-designed and of quality to enlighten students throughout their path by meeting their needs, orienting them towards success, clarifying their expectations, creating strong bonds between them and the institution, and giving a meaning to their educational experience (Kuh et al., 2016).

This delivery of all kinds of non-financial information such as counseling, career guidance, seminars, training workshops, etc. can be provided by institutions or national organizations to help students in choosing wisely their majors, rethinking their decision of dropping out, and improving their views toward studying (European Commission, 2015).

### 2.4.4     Academic Assistance

In an attempt to help students academically, several practical solutions to put in place structures and procedures related to the organization of teaching and learning were found successful. For example, addressing the duration of the study, types of degrees offered (short degrees, Bachelor, Master's), concrete course arrangements, interactive classrooms based on positive student-professor interaction, advanced support study material, continuous feedback, friendly campus environment, financial support, quality assurance and accreditation (European Commission, 2015), accredited and accurate information before registration, admission test and specific criteria set (Ascend Learning, LLC, 2012), student success courses (Gardner and Jewler, 1995), remedial courses to higher skills (Kuh, et al., 2006), and peer-to-peer support (Stigmar, 2016).

To choose the most relevant academic prevention strategies, Gentry (2014) proposed starting by observing students´ potentials and academic needs. An organization can work effectively in decreasing dropout by providing a non-stressful learning environment for students by choosing caring and professional staff members who are empowered enough to take risks and help students throughout their university years; likewise, the teaching methods need to be reliable, appropriate, instructive, applicable professionally, influential, motivational, based on competencies and students' strengths and targets, and interactive; and classes need to be small to provide each student the time they need to learn or corporate with others through teamwork, guided peer activities or presentations to improve skills. Besides, when organizing lesson plans, instructors must take into account the importance of listening to their students

by providing them with a friendly environment and giving enough guidelines throughout the learning process. According to Hu (2010) and Allen (2011), organizations succeed in maintaining their students by engaging them socially and initiating in them the inquisitiveness, wisdom, motivation, and love to learn and succeed in their studies.

## 2.4.5. Data Input

In the purpose of decreasing the dropout rate and producing action plans to allow institutions to interfere and limit the dropout phenomenon, Kuh et al., (2006) mentioned the importance of "early warning systems" and strategies to deal with at-risk students once recognized before it is too late. Further researches thought of different ways to collect data and prevent dropouts, Education Data Mining (EDM) researchers came out with several "prediction models" (Hasbun et al., 2016), and Deary et al. (2013) in addition to Gillis (2007) introduced the concept of "student inventories" to collect data consistently to observe, analyze and solve any individual or relational drawback from the students' side towards the program, institution or peers (Ascend Learning, LLC, 2012). Several current researchers have also thought of different tools to collect data through as SPEET: visual data analysis of engineering students performance from academic (Dominguez, Vilanova, Prada, Vicarion, Barbu, Pereria, 2018) and Ray and Saeed (2018) who described how from which educational data mining (EDM) and learning analytics (LA) could facilitate the process. Furthermore, Gillis (2007) and Glossop (2001) considered "exit interviews" as very valuable in obtaining dense information about dropout reasons and helping in improving a program and decreasing students' dropout (as cited in Ascend Learning,

LLC, 2012). All these tools helped in spotting the main and secondary predictors of dropout.

Acevedo Calamet (2020) updated Tinto´s model (2012) "Elements of a Model of Institutional Action" to make it adaptable to the unfavorable socio-academic situation as Rivera in which the study took place. This model allows the academic institutions to approach the unfavorable regions and implement specific prevention strategies.

**FIGURE 3.** *AN ALTERNATIVE TO TINTO'S MODEL THAT IS APPLICABLE IN UNFAVOURABLE SOCIOACADEMIC SITUATIONS (ACEVEDO CALAMET, 2020, REVISTA ESPAÑOLA DE PEDAGOGÍA, 78, P. 257)*
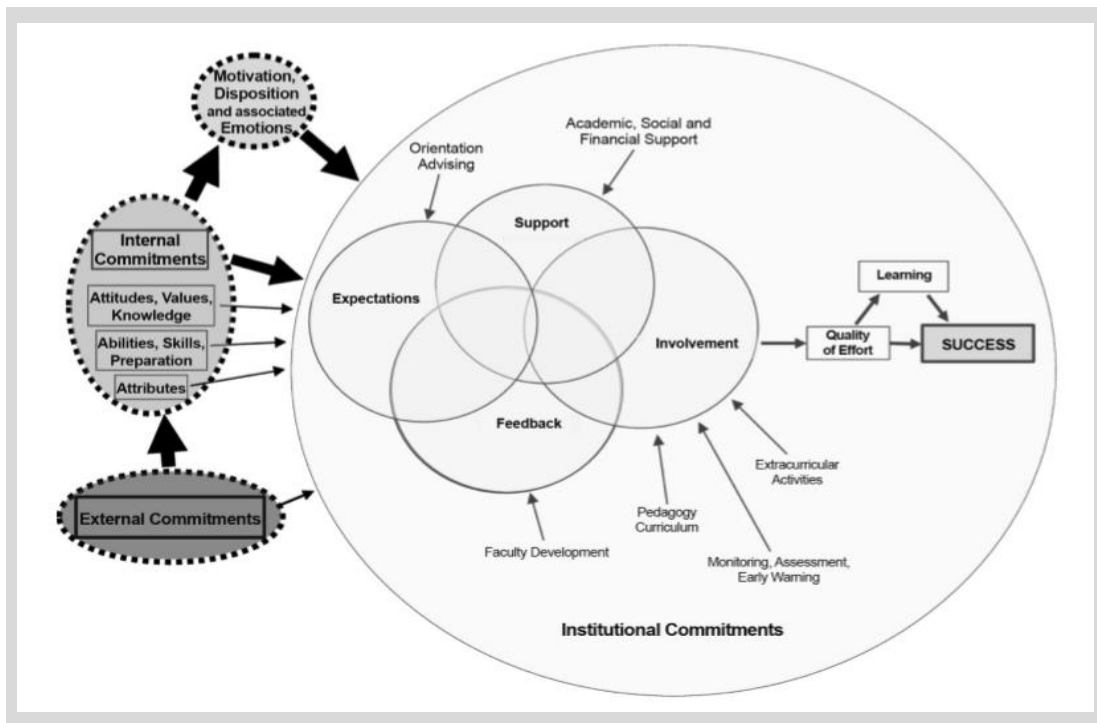


In addition, Acevedo Calamet (2020) also proposed a model to promote "persistence and student success in unfavourable socio-academic contexts".

FIGURE 4. *A PRO-STUDENT PERSISTENCE MODEL FOR HIGHER EDUCATION SUITABLE FOR UNFAVOURABLE SOCIO-ACADEMIC CONTEXTS (ACEVEDO CALAMET, 2020, REVISTA ESPAÑOLA DE PEDAGOGÍA, 78, P. 266)*

institutional-organizational area (medium term)

linking secondary/higher education to improve academic conditions of students before they enter higher education

cultural capital ←→ academic competences

values / expectations / interests

*internal commitments*

expanding and diversifying HE offer

LOCAL/REGIONAL HE OFFER

*external commitments*

institutional area (long term)

entering local/regional HE centre

institutional-organizational area (short and medium term)

*centre effect (institutional commitments)*

processes for getting to know entrants (i.e. diagnostic tests) and spaces for social and academic support (information, orientation, tutoring, short courses)

specific processes for developing motivation for studies and other socio-emotional skills: resilience, self-efficacy, positive coping

logical methods for active and collaborative learning

strategies for improving *centre effect*: educational quality, atmosphere, governance, meeting expectations (professional training, academic continuity, workplace integration), orientation, monitoring, evaluation, social, academic, and financial support, pedagogy, curriculum, teacher-student interaction, extracurricular activities

BETTER ATTITUDE: MOTIVATION FOR COURSE, EFORT, STUDY, RESILIENCE

REDUCING DROPOUT RISK

PERSISTENCE INTENTION

SUFFICIENT ACADEMIC PERFORMANCE

STUDENT SUCCESS

persistence in HE

60

## 2.4.6   Synthesis

Although many attempts have been done to decrease dropout, dropout solutions have been subject to several challenges due to different limitations in experiments and studies or due to lack of data (European Commission, 2015, 2018).

Generally, most solutions concentrate on the first semester after registration or on the period of dropping out and neglect the years in between. The observation of students' paths in the university must not be limited in time to be able to determine the chronological impact of different dropout predictors.

The lack of data on how financial theories and different aid types can affect the gap between students' cultural backgrounds is the main drawback of Financial aid in tackling students' socioeconomic and cultural differences (Desjardins, 2008).

Academically, the late arrival of grades most of the time, doesn't allow early school intervention and actions to prevent students from leaving school.

In general, knowing the reasons for dropout and having unified methods or dependable data to analyzing them, in addition to getting access to previous droppers, have been considered the biggest challenges when dealing with higher education attrition (Tinto, 1975; Glossop,2001; Deary et al., 2003; Dodge et al., 2009; Ascend Learning, 2012).

Moreover, Kuh et al. (2016) referred to the complex "student departure puzzle" of Braxton, Sullivan, and Johnson (1997) which tackles the factors of students' withdrawal from college and which according to Kuh et al. (2016), no retention approach was able to deal with all these factors combined. According to Rumberger (2006), in an attempt to prevent students from dropping out, institutions must focus on

the environment of the students from their families, to schools, societies, and friends. Therefore, to seriously improve the retention solutions, researchers must consider both economic and non-economic solutions from an individual, institutional, social and national perspectives, and must think of operative involvement strategies to deal with individual values, attitudes, and behaviors from one side and institutional, familial, and community factors form another side (Gentry, 2014).

Although the persistence of the students during their studies is highly affected by the institutions' programs and policies, students can never succeed without a personal decision of investing time and hard work in their studies (Kuh et al., 2006).

## 2.5 Higher Education Dropout and Completion in Europe

This chapter presents an overview of dropout in European countries to be narrowed later on to tackle the national Spanish situation to set the ground before investigating further the Catalan environment.

### 2.5.1 A Glance at Higher Education in Europe

Europe 2020 has set a new plan for European countries to improve tertiary graduation rates to 40% among adults aged between 30 and 34. Decreasing dropout and increasing study completion and success are considered as highly crucial for three-quarters of the European countries who assume their need in having high-level skills to improve and innovate economy, productivity, and social justice (European Commission, 2015).

According to the European Commission report (2015), there are three types of policies on the national level of each country which are later elaborated by each institution to

stimulate study success: organization policies, financial policies, and student support policies. These policies are directed differently among European countries depending on study success. Some countries as Austria, Bulgaria, Czech Republic, Germany, Iceland, Latvia, Lithuania, Poland, Slovakia, Slovenia, Sweden, Turkey are oriented toward study completion; some others as Croatia, Cyprus, Denmark, England, Estonia, Finland, Flanders, Greece, Hungary, Luxembourg, the former Yugoslav Republic of Macedonia, Montenegro, Netherlands, Norway, Portugal, Romania, Serbia, Spain, Switzerland would like to give the student an adequate time to complete their study program (time-to-degree); as for Ireland, it aims to retain students from dropping out by re-enrolling them in a study program until they complete it (retention); some countries as Italy and France have mixed views towards study success, as for Malta, it orients students based on the needs of the labor market (Based on the national experts 1st and 2nd HEDOCE questionnaire, 2014 as cited in the European Commission, 2015).

Following their national policies and strategies, many European countries have stepped a huge leap forward towards increasing the rate of higher education graduates and decreasing dropout.

*FIGURE 5. TERTIARY EDUCATION PROGRESS IN EUROPE- BY COUNTRY, BETWEEN THE YEARS 2008 AND 2015 (EUROSTAT, 2016).*
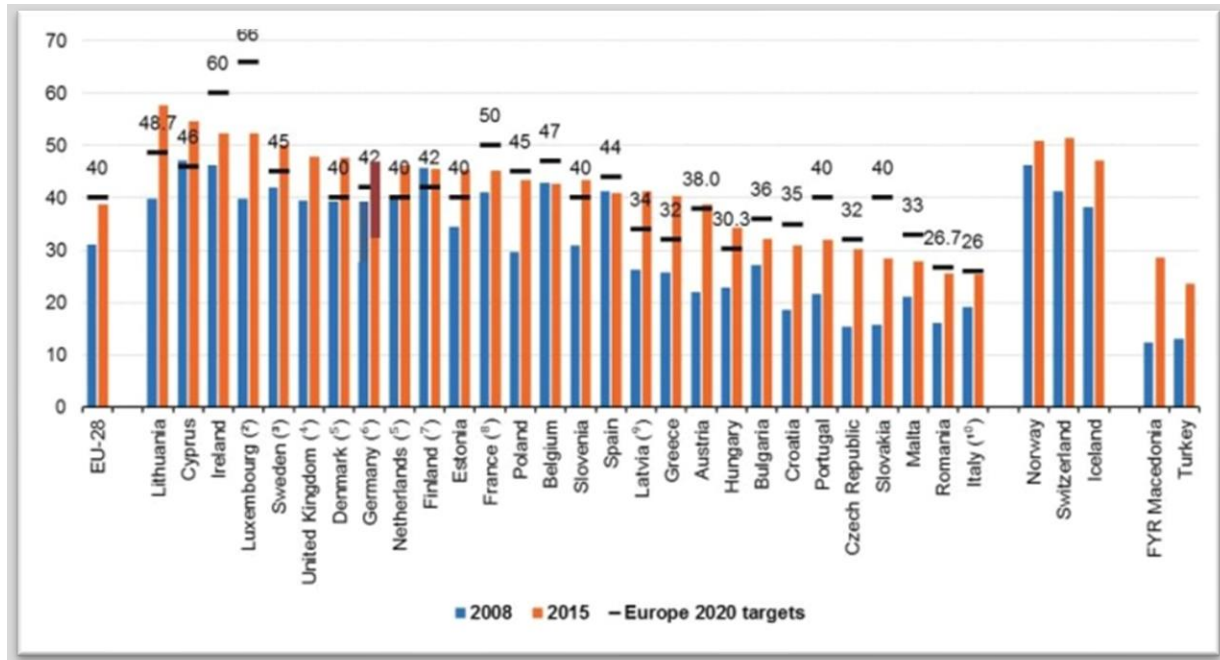


In general, tertiary education among people aged between 30 and 34 has improved in Europe from 23.6% in 2002 to 38.7% in 2015 (Eurostat, 2016); similarly on the international level, countries like Canada, Finland, Russia, and Ireland in which 20% to 30% of students raised in families with no high school diploma managed to have a college degree due to the balanced and unbiased opportunities offered for students from low socioeconomic backgrounds to be able to register in higher institutions (Weston, 2014).

## 2.5.2   A Close-up on Spain

- **The Economic Effect of Dropout**

Observing higher education in Spain most specifically in the University of Galicia, Arce et al. (2015) critically evaluated the Spanish students' behavior towards

university studies and noticed that 1 out of 5 students were dropping out constantly for numerous reasons. Such a phenomenon affects directly the economic growth of Spain and costs the state about "5.772 euros per year and per student", "exceeding 1.5 million euros if the student drops during the 1st cycle" (Arce et al., 2015).

*FIGURE 6. UNIVERSITY DROPOUT COST PER YEAR AND PER STUDENT IN SPAIN (ARCE ET AL., 2015)*
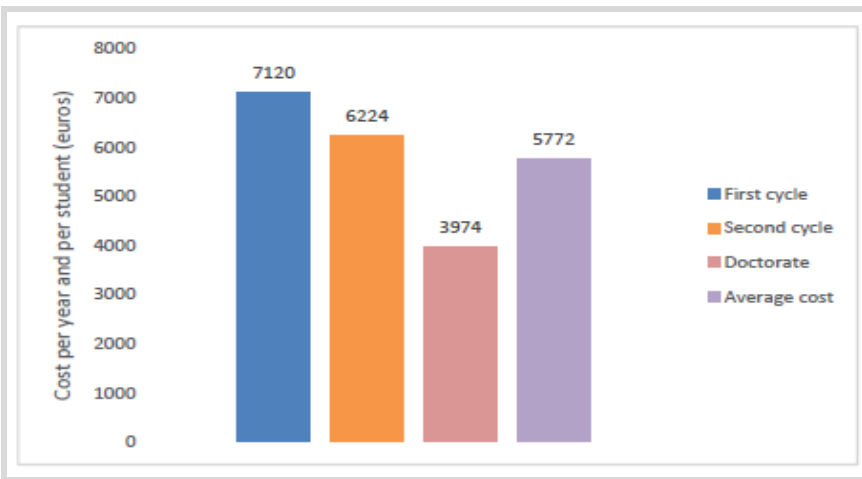


Considering its enormous effect especially on the economy, the decreasing dropout rate has been put on the agenda as an important issue for the Spanish government (European Commission, 2015). Spain's 2020 goal is to diminish 15% of the dropout rate and to increase the tertiary education percentage to surpass 44% (Arce et al., 2015).

- **Dropout Rates in Spanish Regions**

Dropout rates vary from a region to another in Spain and have changed throughout the years. In the following graph, the dropout rate progression from years 2005-2006 to years 2009-2010 has proven that after Lisbon Strategy (2000), some serious concerns and moves have been taken by the Spanish Ministry of Education in most Spanish regions to decrease the dropout rate (Arce et al., 2015). Based on the numbers given,

the general dropout rate in Spain has decreased from 22.61 in 2006-2009 to 13.12% in

2009-2010.

**FIGURE 7.** *PROGRESSION OF THE DROPOUT RATE DEPENDING ON THE REGION IN SPAIN AND THROUGHOUT THE YEARS 2005-2006, 2007-2008, 2009-2010 (ARCE ET AL. 2015).*
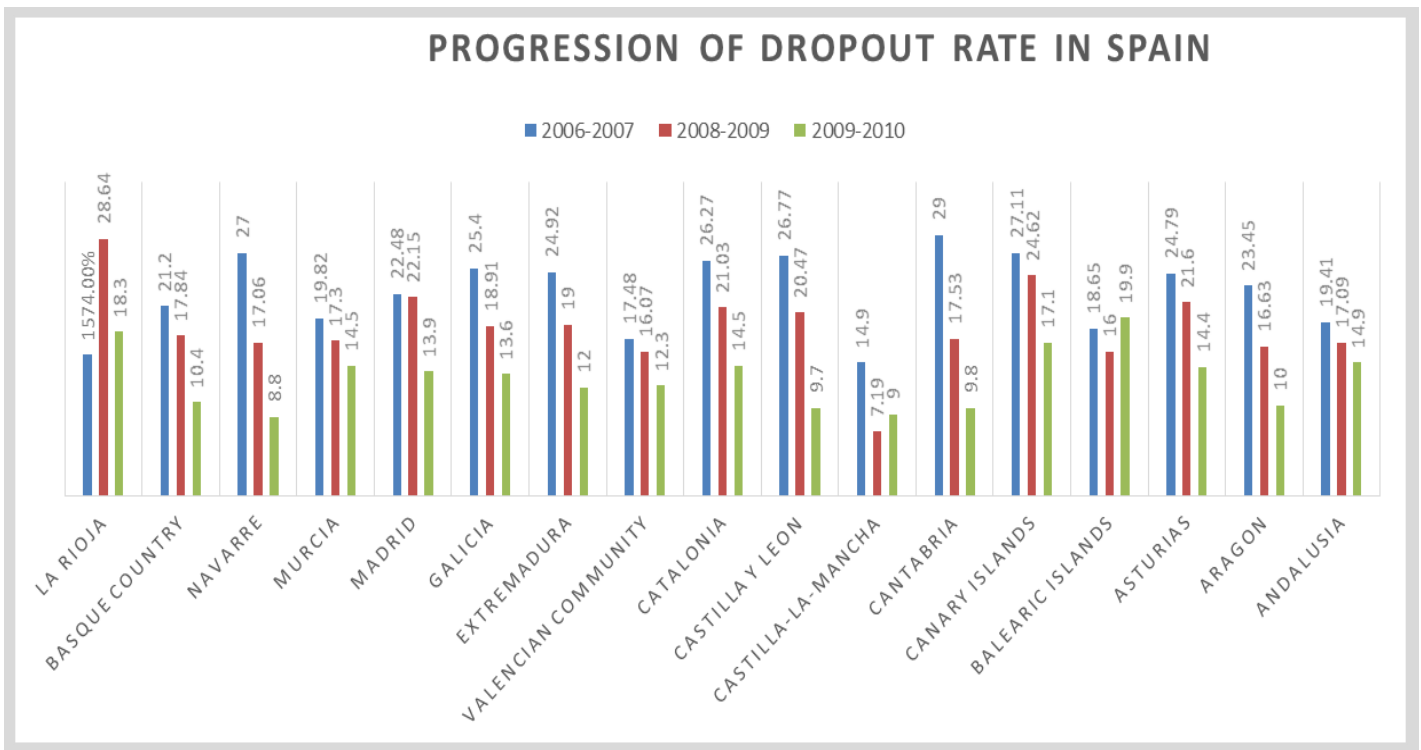


- **Dropout Rates and University Types**

In addition to the variation between regions, another noticeable difference in dropout

rates in Spain can be distinguished among different types of universities; private and

public; face to face and distance (Arce et al. 2015).  The following two graphs explore

the different dropout rates of Bachelor's and Master's studies in different university

types.

**FIGURE 8.** *BACHELOR DROPOUT RATES DEPENDING ON UNIVERSITY TYPES IN SPAIN IN 2009/10. (ARCE ET AL., 2015)*
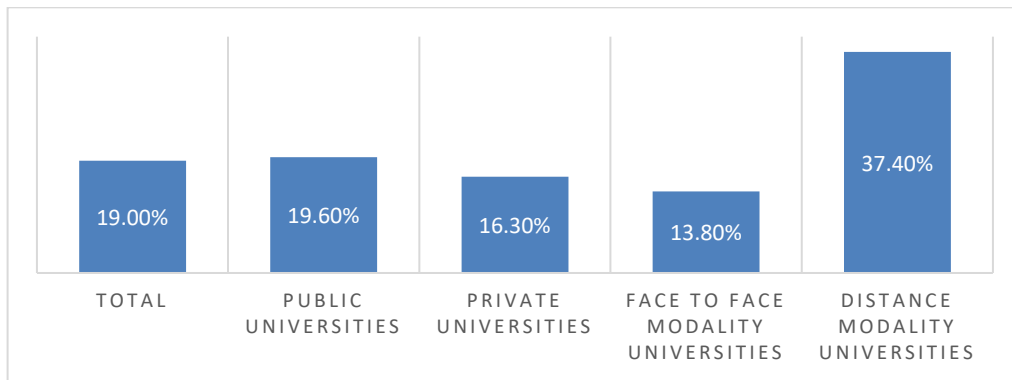


**FIGURE 9.** *MASTERS DROPOUT RATES DEPENDING ON UNIVERSITY TYPES IN SPAIN IN 2009/10 (ARCE ET AL., 2015)*
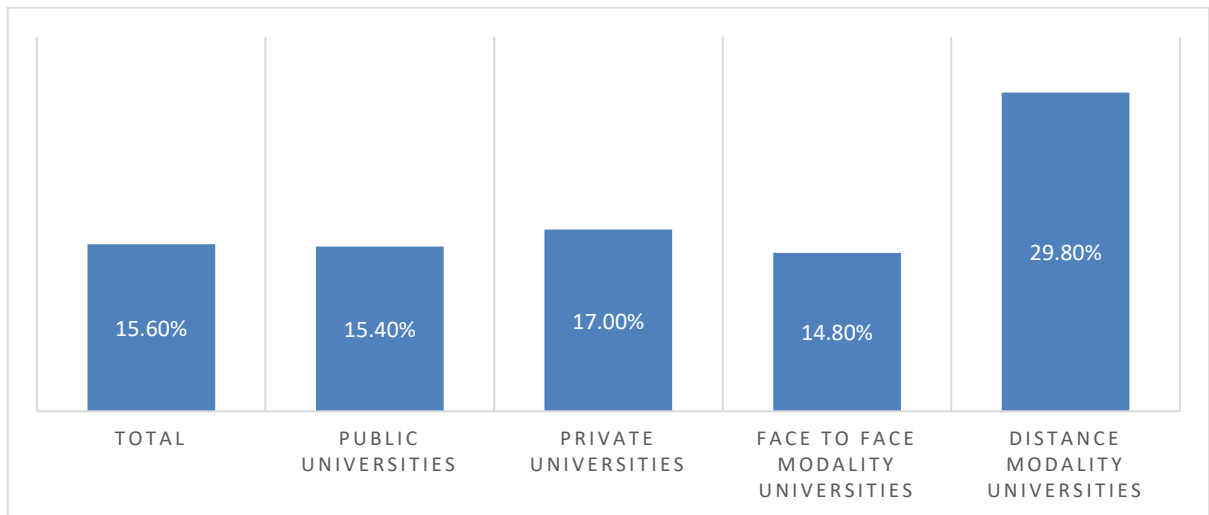


These two graphs illustrate the fact that throughout their Bachelor's programs, public university students tend to drop out more than private ones in opposite to during Master´s studies.

The graphs also show that the most noticeable dropout rates in both programs are in distant learning modalities (Arce et al., 2015).

- **Dropout vs. Transfer out**

Bearing in mind that transfer out or study exchange as called by Arce et al. (2015) means dropping out from a university or a major to start another, this section explores this phenomenon in Spain to observe the students' post departure behavior.

During their Bachelor studies in the academic year 2009-2010, 7.1% of the students who departed from a major, transferred out to another major; compared to 3.5% of those who quit their Master's program (Arce et al., 2015). These percentages imply that switching in majors is more common among students in their first university years than students doing their Master's studies; the latter usually drop out unwilling to return or transfer out.

In an attempt to compare transfer out and dropout in the Spanish regions, Arce et al. (2015) projected the following graph showing that transfer-out rates are half of the dropout rates in all the regions of Spain. Such percentages indicate that dropout is a major trend among young people and dealing with it is essential for the country's development.
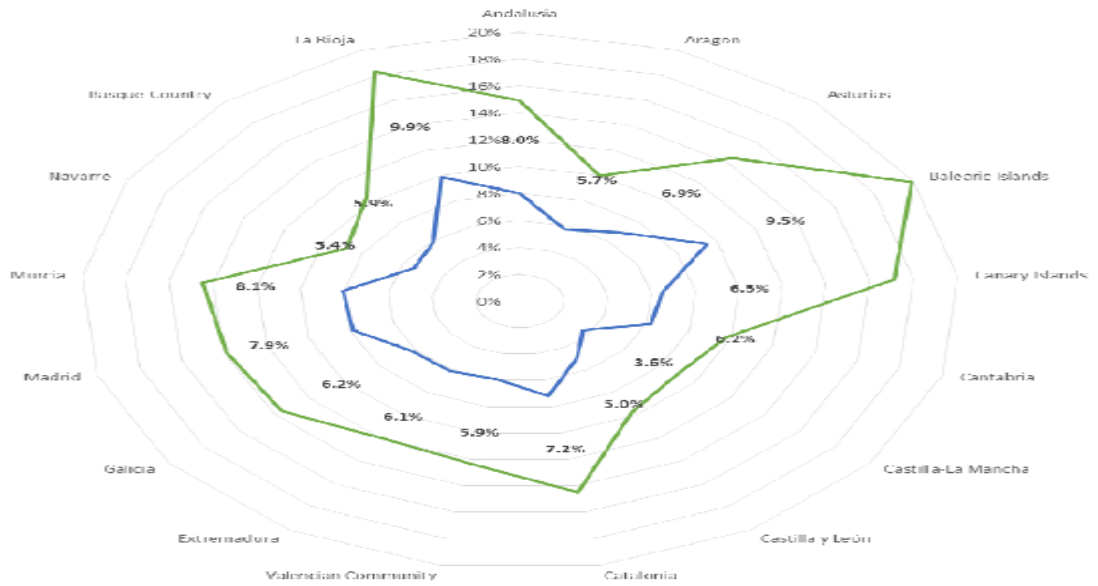
### 2.5.3 Synthesis

Due to their complexity and broadness, study success and dropout definitions differ across countries on both international and European levels (European Commission, 2015).

The direct effect that study success has on the economy of European countries has made dealing with tertiary education dropout very essential and on the policy agenda of most European countries.

According to the report of the European Commission (2015), increasing study success and decreasing dropout rate are impacted by several factors on all levels: national, institutional, and personal which will be discussed in further chapters.

Being focused on the Catalan region of Spain, the following chapter explores higher education dropout in Catalonia to set the ground for further investigation.

## 2.6 A Panorama on Higher Education Dropout in Catalonia

The tertiary education among the Catalan population has noticeably grown after the implementation of several equity policies; however, as tertiary education participation continues to be related to the socio-economic background of the students, Catalonia is still facing problems in maintaining students at higher education institutions and is recommended to improve financial, academic, and social assistance (OECD). Despite this improvement of dropout rates throughout the years,  Catalonia is still placed in the 5th place from the back of the list among Spanish regions (check figure 7), and Catalan higher education institutions are still facing a dropout percentage ranging between 28% to 33% (Gairin, Tirado, Feixas, Figuera, Aparicio-Chueca, & Torrado, 2014).

### 2.6.1 Reasons for Dropout in Catalonia

Catalonia tertiary education has expanded over the past few years to include eight public universities, four privates ones, and more than 300 centers providing vocational tertiary education (OECD). Although Catalonia´s undergraduate and master´s students constitute 12.5% of the general number of students in Spain (OECD), continuous studies that are concerned with Catalan higher education dropout or "abandonament" are very few (Joaquín Gairín et al., 2016).

Based on the findings of some national database analyzing students who enrolled in public universities in 2002 and then dropped out for a minimum of one term and were re-enrolled in 2005-2006; deficient guidance and lack of functional policies at the

entrance of any public university in Catalonia were the main reasons that affected the students' choices and lead to drop out, stop out or transfer out (Rodriguez-Gómez et al., 2016).

According to AQU, 33.6% is the average of dropout in Catalan public universities, mostly in the fields of Social Sciences (40%), Technical Degrees (29.9%) and Arts (17.2%) (Rodríguez-Gómez et al., 2012, 2015; Rodríguez-Gómez et al., 2016). Out of this percentage, 18.4% have passed a non-Catalan entrance exam so did not do the Catalan "Selectividad" exam and 29% have transferred from other higher education institutions (HEI) and have no records in Catalan universities (Rodríguez-Gómez et al., 2012, 2015).

In addition to the previously mentioned antecedents of dropout in Catalonia, the lack of orientation after secondary studies, the "Selectividad" exam which affects directly the choice of the students' majors (Rodríguez-Gómez et al., 2012), and the low academic performance of Catalan students during high school compared to other European students (OECD) are also some of the causes of dropout (Rodríguez-Gómez et al., 2012, 2015). Besides, according to CYD reports (2010) that analyzed the relation between Catalan universities and the job market, the Catalan educational institutions are academically and organizationally unprepared to help the country's economy and to transfer the needed knowledge and skills for students to enter the job market; they are more focused on theoretical orientation than practical one (Rodríguez-Gómez et al., 2012, 2015).

Furthermore, the disappointment with the quality of orientation, and support offered by Catalan public institutions, in addition to the personal responsibilities the students

have and their critical economic situation are also considered as reasons for dropout in Catalonia. Moreover, researchers tackling higher education in Catalonia have shared their concern on the quality of education in Catalan universities (Rodriguez-Gómez, Meneses, Gairin, Feixas, Muṅoz, 2016), making the relationship between dropout and the quality and standards offered by the Catalan educational institutions very critical (Joaquín Gairín et al., 2016; Rodríguez-Gómez et al., 2012).

According to Rodríguez-Gómez et al. (2016), the Catalan university system is way more complicated than any other system, it is "overcrowded, homogeneous and had little internal mobility of students and teaching staff" compared to other countries, also it has "a lack of an adequate national scale data set" to track students once registered at university; 12.7% only of students who stop out, re-enroll in the same area of knowledge, and 76.9% of them go back to university in their first year, as for the others, the universities have no track of them.

Regarding socio-demographic, Rodríguez-Gómez et al. (2016) indicated that Catalan men and adults aged above 25 tend to drop out more than women (51.4%). Age-wise, studies on Catalonia have shown that there is a strong relationship between nationality and age from one side and re-enrollment from another. However, in general, attributes as gender, age, parents' studies, and employment, do not show any noticeable effect on dropout in Catalan universities (Rodríguez-Gómez et al., 2012), nevertheless, an OECD report has shown that having to work and study at the same time limits the ability of students in Catalonia to continue their higher education studies or complete them in time.

In general, the main weakness of tertiary education in Catalonia is the intersection between tertiary education, the secondary high school level, and the job market. To understand more how to improve this drawback and how to deal with higher education dropouts, Catalonia needs to give more attention to the lack of structured methods to gather worthy data related to students' dropout to investigate deeper the situation (Rodríguez-Gómez et al., 2016).

### 2.6.2 Suggested Prevention Strategies

Several prevention practices and helping policies were implemented by Catalan public universities to decrease dropout but they did not have a long-lasting effect especially during the first year of students´ studies (Rodríguez-Gómez et al., 2012, 2015; Rodríguez-Gómez et al., 2016).

Studies have shown the decreasing dropout rates in Catalan universities could be done by developing the following measures.

Detect dropout early through early diagnostic tools and a consistent system to define causes and detect at-risk groups (Rodríguez-Gómez et al., 2102, 2015; Rodriguez-Gómez et al., 2016).

Making sure tertiary education is affordable to all students from different backgrounds by developing a form of cost-sharing through loans and grants to prevent dropout during studies (OECD, Rodríguez-Gómez et al., 2012, 2015).

Address human capital by developing a graduate labor-market system or "vocational counseling practices" (Rodríguez-Gómez et al., 2012, 2015) to help students in

selecting their study programs and linking between new graduates and employers (OECD).

Provide new policies and some clear and consistent prevention strategies to guide students throughout their university years especially to avoid senior students from dropping out (Rodríguez-Gómez et al., 2102, 2015; Rodriguez-Gómez et al., 2016).

Strengthen the employability skills in higher education by prioritizing internships and implementing work and problem-based learning methods (OECD) and follow-up with the worldwide innovations in Education (Rodríguez-Gómez et al., 2102, 2015; Rodriguez-Gómez et al., 2016).

Engage younger professors, and develop the teaching techniques (Rodríguez-Gómez et al., 2102, 2015; Rodriguez-Gómez et al., 2016).

Update the educational policies as "university access, induction, tutorship and fellowship programs", and the policies targeting foreign and European students (Rodríguez-Gómez et al., 2012, 2015).

To take a deeper look at the Catalan public educational system, the table below projects the evolution of dropout rates in Catalan public universities showing inconsistency throughout the years.

TABLE 3. *ACCUMULATED DROPOUT RATES IN THE CATALAN PUBLIC UNIVERSITIES.*

| Accumulated Dropout Rates | | | | | | | |
|---|---|---|---|---|---|---|---|
| University | 00-01 | 01-02 | 02-03 | 03-04 | 04-05 | 05-06 | 06-07 |
| Universitat de Barcelona (UB) | 18.82% | 17.19% | 18.87% | 19.06% | 18.22% | 18.58% | 19.66% |
| Universitat Autonoma de Barcelona (UAB) | 15.89% | 16.10% | 17.18% | 17.50% | 18.36% | 24.18% | 24.18% |
| Universitat Politecnica de Catalunya (UPC) | 22.30% | 20.68% | 22.20% | 23.19% | 24.55% | 26.89% | 26.35% |
| Universitat Pompeu Fabra (UPF) | 16.06% | 17.26% | 20.04% | 18.68% | 17.79% | 18.13% | 15.71% |
| Universitat de Girona (UdG) | 20.63% | 21.24% | 21.10% | 21.95% | 22.15% | 23.15% | 24.57% |
| Universitat de Lleida (UdL) | 17.69% | 14.42% | 16.33% | 15.51% | 16.13% | 17.22% | 16.94% |
| Universitat Rovira i Virgili (URV) | 22.32% | 19.85% | 19.84% | 18.53% | 17.86% | 18.04% | 17.82% |

## 2.6.3 Synthesis

Based on the few studies on higher education dropout in Catalonia, the antecedents of this phenomenon in Catalan public universities can be summarized as the following:

- Weak quality of education.

- Underprovided guidance and lack of practical policies at the entrance of any public university.

- Lack of orientation after secondary studies.

- The limitations set by the "Selectividad" exam.

- The academic unreadiness of Catalan students to start university studies.

- The weak relation between Catalan universities and the job market.

- The disappointment with the quality of orientation, support, and education offered by the universities.

- The economic situation of the students.

- The complication of the system in Catalan public universities.

- The inability to track students once registered at university.

Although some efforts have been made to decrease dropout rates in Catalan public universities, the outcomes and results are neither consistent nor of long term outcomes from which the importance of this study.

# EMPIRICAL FRAMEWORK

After exploring the theoretical background of dropout studies worldwide and explaining the importance of approaching it in Catalonia, this chapter explores in depth the context of the investigation, the two faculties of Education at UAB and UB, from which the data will be collected.

As a first step, this chapter presents a general overview of the Spanish education system; more specifically a description of the transition between high schools and public universities to understand more clearly the path followed by students before registering in a certain major.

Second, this chapter introduces the two public universities from which the faculties were selected; the Autonomous University of Barcelona (UAB) and the University of Barcelona (UB), and projects the hierarchical organization of the faculties of Education in both of them to understand the internal structure of each and to identify the common administrative features.

Finally, the common programs between these two faculties will be introduced, their content will be described, and their characteristics compared to investigate the topic of dropout among them.

## 3.1 Contextualization

Optional Preschool, primary and secondary education are all offered for free by the Spanish. At the end of these three cycles, and in case of study success, the students are offered a graduation certificate (Graduado en Educación Secundaria) which allows them to enter upper secondary education which is also free but optional. At this stage, the students can choose to stop studying, do their upper secondary education to earn a

Bachillerato, or study and work at the same time by doing intermediate vocational training (ciclos formativos de grado medio) to earn a Technical Certificate (Certificado de Técnico) (Expatica, 2015).

The Bachillerato usually takes two years and once the students earn this certificate, they can either sit for the entrance exam of universities (Selectividad) or to take some professional vocational studies.

The university entrance exam is supervised by the state and is constituted of 7 different tests done in three days. The tests cover subjects of upper secondary education, five of them are mandatory for students and two are optional. The mandatory tests include the Spanish language, Catalan language, Foreign language, History of Spain in addition to a subject chosen by the student among Mathematics II, Latin Language II, Principles of Art or Mathematics applied to Social Sciences. As for the optional ones, they are chosen by the students and should be different from the mandatory ones. These tests help students improve their university acceptance marks. The scores of these exams are combined with the *Bachillerato* scores and constitute 40% of the student's final grade which will decide their expected university major. Depending on the combined score of each topic, the students will be assigned to one of these different areas (Art and Humanity, Sciences, Health, Engineering and Architecture, Social Sciences, and Legal) including the higher education majors they can apply to.

Another option for the students in case they are not interested in doing university studies is the professional vocational courses (ciclos formativos de grados superior) which allow the students to earn professional technical skills that give access once completed to the university system.

When the students earn the *Bachillerato* and pass the entrance exam of the university, they can start their higher education studies to earn degrees (diplomaturas) or professional qualifications (licenciaturas) and can pursue their post-degree education later (Expatica, 2015).

For further clarification, table 4 projects the structure of the Spanish education system.

**TABLE 4.** *THE STRUCTURE OF THE SPANISH EDUCATION SYSTEM (EXPATICA, 2015)*

| Stage | Optional/Mandatory | Age average |
|---|---|---|
| **Nursery (Guarderia)** | Optional | (0-3 years) |
| **Preschool (Educación Infantil)** | Optional | (3-6 years) |
| **Primary (Educación Primaria)** | Mandatory | (6-12 years) <br><br> First cycle: 6–8 years <br> Second cycle: 8–10 years <br> Third cycle:10–12 years |
| **Secondary Education (Educación Secundaria Obligatoria)** | Mandatory | (12-16 years) <br><br> First cycle: 12–14 years <br> Second cycle: 14-16 years |
| **Upper Secondary Education (Bachillerato)** <br><br> **Intermediate Vocational Courses (Ciclos Formativos de Grado Medio)** | Optional | (16-18 years) |
| **University (Diplomatura)** <br><br> **Professional Vocational Courses (Ciclos Formativos de Grado Superior)** | Optional | (18-21+ years) |
| **University (Licenciatura)** | Optional | (18-22+ years) |
| **University Post Degree (2 years)** | Optional | (21+ years) |

There are four types of universities in Spain, university schools (escuelas universitarias), where short undergraduate courses are offered to earn a *diplomatura*; university colleges (colegios universitarios), where the first three years of study lead to a *licenciado* ; faculties (facultades) where longer courses are offered in all academic disciplines except technical courses; and higher technical schools of engineering and architecture (escuela superior de ingeniería y arquitectura) where one can complete long-term technical courses (Expatica, 2015).

These universities lead to either official or non-official degrees. The official degrees include the *Grado* – Bachelor's (four years, 240 ECTS); the *Posgrado* – Master's (one to two years, 60–120 ECTS), and the *Doctorado* – Ph.D. (three to five years, 60 ECTS). These official degrees follow the Bologna European Credit Transfer and accumulation System (ECTS) and are recognized in all European countries in addition to many others. As for non-official degrees as *Maestrias* (non-official degree), *Magister* (non-official master), or Expert Master; are not recognized abroad and do not allow further studies (Expatica, 2015).

This study focuses on two public universities in Catalunya offering both official Bachelor's degrees in the field of Education.

## 3.2 Organization and Study programs of the Faculties of Education in UAB and UB

Most faculties of the Spanish public universities are organized similarly; there is a dean who is the head of the faculty, vice-deans who support the dean in several academic areas, coordinators who are usually professors and are responsible for managing the study programs, and professors or Ph.D. holders who are with daily and

direct contact with the students. The number and responsibilities of vice-deans and coordinators differ between faculties and universities depending on the offered majors and needs of each. In the following graphs, the organization of the faculties of Education at UAB and UB will be projected to highlight the differences and the common features between them. It is also worthy to mention that every faculty has several departments, but their work is bureaucratic, so they do not interest in this study.

**FIGURE 11.** *THE STRUCTURE OF THE FACULTY OF EDUCATION AT THE AUTONOMOUS UNIVERSITY OF BARCELONA.*
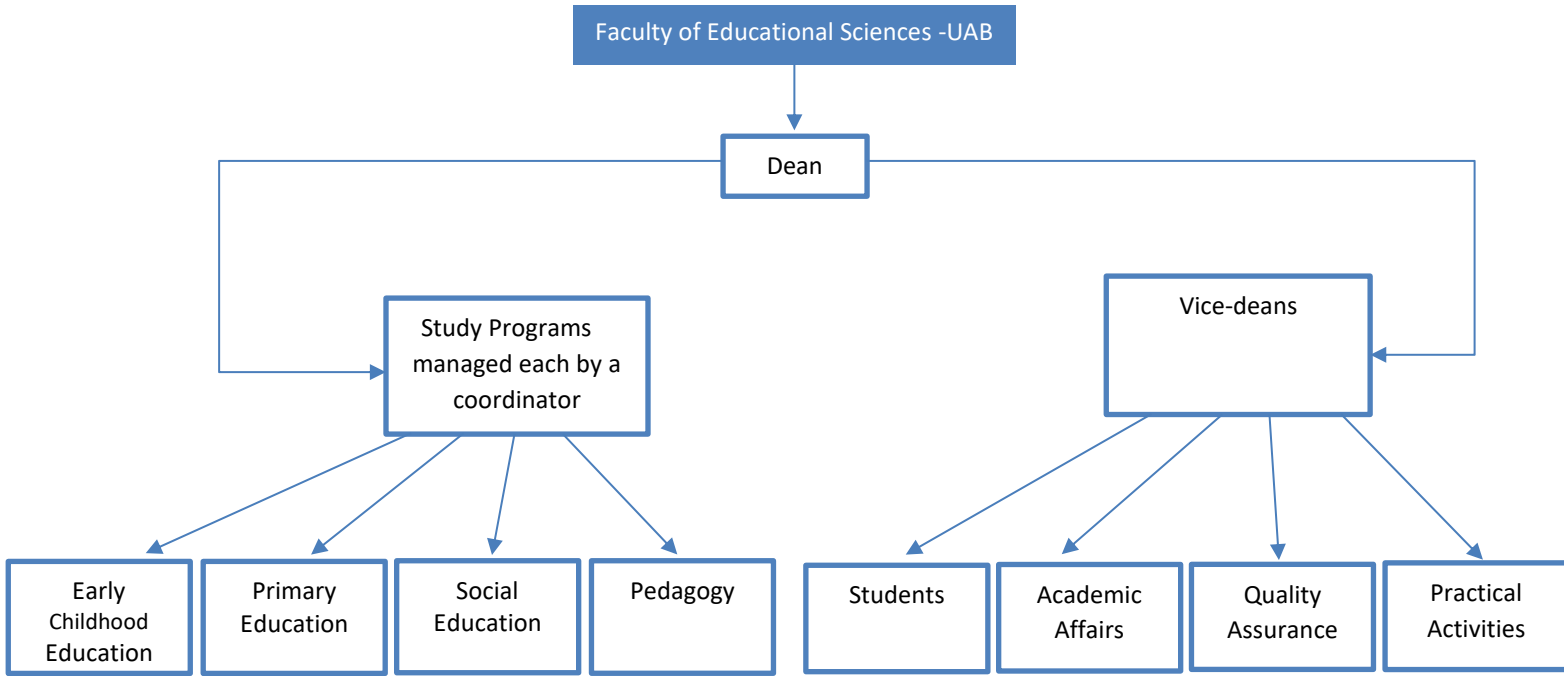


**FIGURE 12.** *THE STRUCTURE OF THE FACULTY OF EDUCATION AT THE UNIVERSITY OF BARCELONA.*
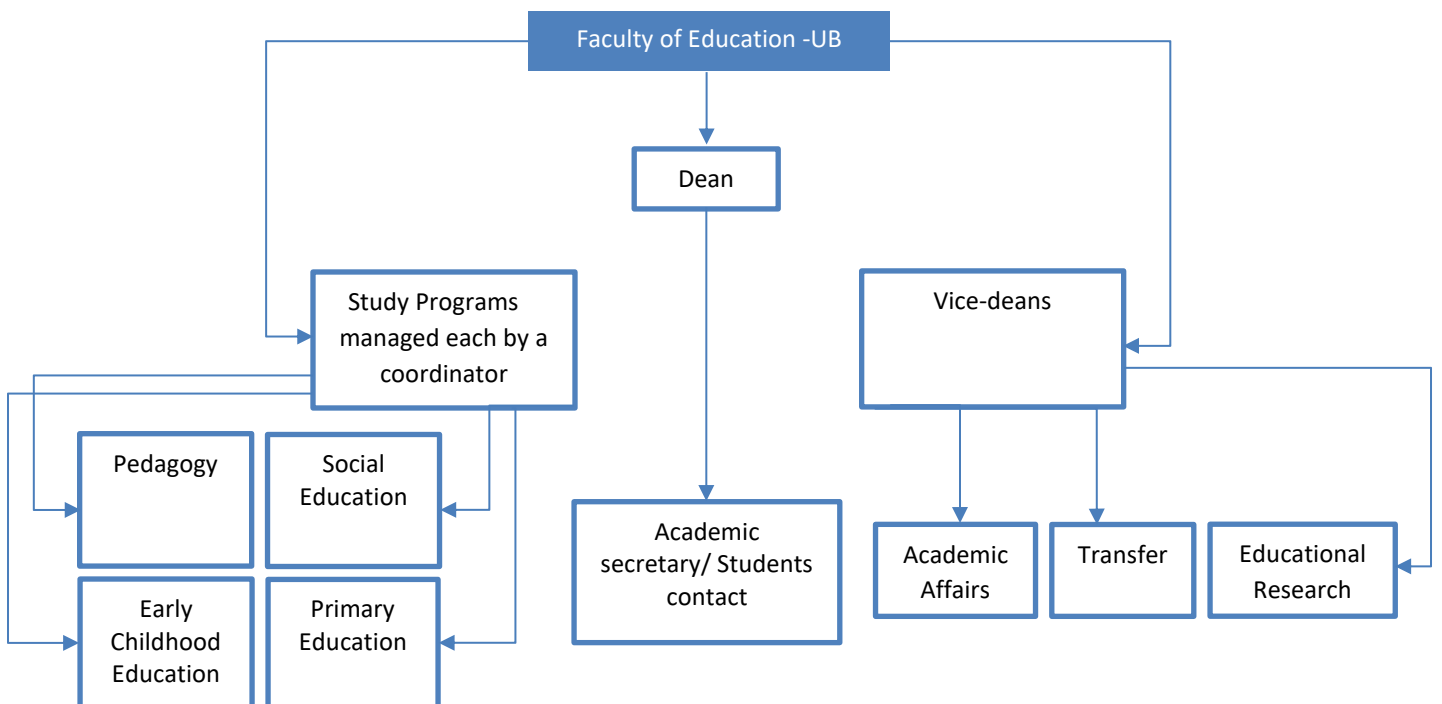
These two graphs represent the structures of the faculties of Education at UAB and UB respectively, they show the four common study programs that this study is interested in (Early Childhood Education, Primary Education, Social Education, and Pedagogy); they also show the differences between the official titles of the assigned vice-deans depending on the needs of each faculty, pointing out that the faculty of Education at UB does not have a special vice-dean for students, it is one of the assigned roles of the academic secretary.

After viewing the distribution of functions and the official organization of the faculties of Education at UAB and UB, the following part describes the content of the four study programs this study focuses on when analyzing students' dropout.

UAB and UB are two of the highly ranked universities in Spain and the world according to Times Higher Education (2017); UAB is ranked the 147th in the world and the 2nd in Spain and UB is between the best 201-250 universities in the world and the 3rd in Spain, which explains the large number of students registering yearly in these two universities due to the quality of education offered in their faculties. The faculties of Education in both UAB and UB have gained through time a very good reputation among other universities in Spain. Based on their websites, they receive yearly 600 new students approximately divided into four different study programs: Early Childhood Education, Primary Education, Social Education, and Pedagogy.

Early Childhood Education prepares students aiming at becoming teachers for kids between 0 to 6 years old; it offers them the necessary knowledge and training needed to work with educational institutions and to prepare educational material for these ages based on the Catalan education system. The major duration is 4 years and in both faculties, the students must accomplish 240 credits to graduate. It is worthy to mention

that at UAB, in addition to the *Bachillerato* and *Selectivo* common final marks, the students need to pass a personal aptitude test before being accepted in such a major.

Primary Education aims to provide the required training for students aiming at becoming teachers of children aged between 6 and 12 years old. It allows graduates to work in formal and non-formal educational institutions, hospitals, extracurricular companies, and any educational related activity for such ages. Similarly to Early Childhood Education, the students have to pass a personal aptitude test before being accepted at UAB and to graduate and be specialized in teaching a foreign language, physical education, musical education, or supporting special needs, they also have to accomplish 240 credits throughout 4 years in both universities

Social Education provides socio-educational training for students who want to offer help and guidance to people risking social exclusion. This major prepares students to analyze socio-educational theories and come up with new related programs and resources to help as a social worker. To graduate and receive a bachelor's degree in Social Education, the students have to finish 240 credits in four years.

Pedagogy or also known as Education Studies provides students with the necessary knowledge and training to explore, analyze, evaluate, and improve educational systems, programs, activities, and projects in formal and non-formal educational institutions. This major helps in forming future pedagogues, people who can improve society through education by solving problems of multicultural environments and training teachers to adapt to changes in education. This study program consists of 240 credits split into 4 four years in both faculties of Education of UAB and UB.

Being common between UAB and UB, Early Childhood Education, Primary Education, Social Education, and Pedagogy are the study programs that this thesis will

focus on in the purpose of describing, analyzing, and evaluating the phenomenon of dropout.

## 3.3 Methodology

Having set the problematic of this thesis, evaluated the literature background, described the required objectives, and contextualized the study; this chapter serves as a description of the operational phase of the methodology through describing the method chosen to reach targets, the ways by which data was collected, and the strategies followed to explore, validate and analyze the data.

As a start, the chapter begins with a review of the general theme and objectives of this study and goes on to introduce the coming steps including the method used for investigation, which in this case is the mixed method. Through this part, the characteristics of the mixed method will be described, in addition to its advantages and drawbacks as a method of investigation and its importance in reaching the objectives of this study.

Next, an explanation of the qualitative method, its characteristics, advantages, and instruments will be presented to justify its integration in the analysis of this study.

After viewing the features of the qualitative analysis, comes the description of the quantitative analysis. The characteristics, instruments, types of variables, and steps of analysis will be discussed to show the importance of such examination in studying dropout.

Then, the process of collecting information will be explained by describing in detail the different instruments used and their content to gather the necessary data from the concerned public.

Finally, the last part of this chapter describes the different kinds of analysis performed for each chosen instrument.

## 3.3.1 Methodological Approach

Taking into consideration the background knowledge we have regarding higher education dropout and the approach of the study (Hernández, Fernández, & Baptista 2007), the current research has been based on discripto-explanatory research as its main goal was to explain the phenomenon of dropout in the faculties of Education at two of the well—known Catalan universities as well as investigates its antecedents to come up with strategies to help higher education institutions decrease its rates.

The research has been carried out to investigate the dropout phenomenon without causing any manipulations that might alter the reality or results (Hernández et al., 2007), The descripto-explanatory research describes the concept of dropout through the collection of data and the correlational studies to link between different variables to be able to find the causes and come up with solutions. The descriptive characteristics of the study are the data collected from the specific faculties, allow to obtain a global approach to the phenomenon of dropout in context of the selected universities Furthermore, although most researches must be frames under a certain paradigm (Sandín, 2003)., researches in Education are apparently more complex (Latorre, Rincón,& Arnal, 1996) in this sense, the current research presents a paradigmatic that

uses a mixed design (Hernández, Fernández,& Baptista,2014), considering both positivism and interpretivism.

Positivism sets hypotheses and then collects data to provide quantitative analysis to check whether or not the results support the hypotheses and to solve problems through inductive or deductive reasoning (Latorre et al., 1996). Interpretivism requires the use of research techniques to understand phenomenon through the agents involved in order to describe the context and the interpretation in their view (Latorre et al., 1996). On the one hand, this research conducted interviews to understand higher education dropout from the faculty perspectives and asked open-ended questions in the surveys for student to get their point of view too which were analyzed in the philosophy of interpretivism. On the other hand, the research also focuses on a questionnaire directed to students with closed questions which was analyzed on the philosophy of positivism as the survey was done based on theories and analyzed quantitatively so its results could prove or reject the hypotheses.

## 3.3.2 Methodological Design

### 3.3.2.1 Mixed Method

Johnson, Onwuegbuzie, and Turner (2007) referred to the "classic pragmatic philosophers" who think of the present as "always a new starting point", a concept that explains their refusal to limit the definition of the mixed method which, according to them, is in continuous development as a "research paradigm". According to Johnson et al. (2007), mixed-method research is not a new research method; however, the nomination goes back only to the beginning of the 20th century. The concept started

with Campbell and Fiske in 1959 as "multiple operationalism", and then was developed by Webb, Campbell, Schwartz, and Sechrest in 1966 to become "triangulation" and by Denzin in 1978 who introduced the four types of triangulation (data, investigators, theory and methodological) (as cited in Johnson et al., 2007). Many other researchers followed the same path, they believed in a method that mixes between both quantitative and qualitative approaches, a type of analysis that became very popular in the 20th century and was later known as the mixed method (Johnson et al., 2007).

According to Johnson et al. (2007), the mixed method stands between the two extreme views of quantitative and qualitative methods, it is "an approach to knowledge" that logically finds the standpoint that relates theories and practices through considering multiple contributions including different viewpoints, ideas, positions of quantitative and qualitative studies, etc.

To understand the concept of mixed methods, Johnson et al. (2007) referred first to Greene (2006) who considered that the word "methods" represents the methodology used in a study which includes, the methods of data collection and research in addition to some linked philosophical topics. Then, in an attempt to find the current definition of the mixed method, Johnson et al. (2007) gathered several definitions by some recent leaders in the field and found out that they all had somehow a similar view towards the concept; it is a method that is used to examine one research question through combining logically the techniques and procedures of quantitative and qualitative approaches in addition to others, this mixing can occur at the data collection stage, data collection and analysis stages or at all stages.

Based on the experts' definitions collected in Johnson et al. (2007), the mixed method

has several unique characteristics as projected in the following figure.

**FIGURE 13.** *THE CHARACTERISTICS OF THE MIXED METHOD BASED ON JOHNSON ET AL. (2007).*
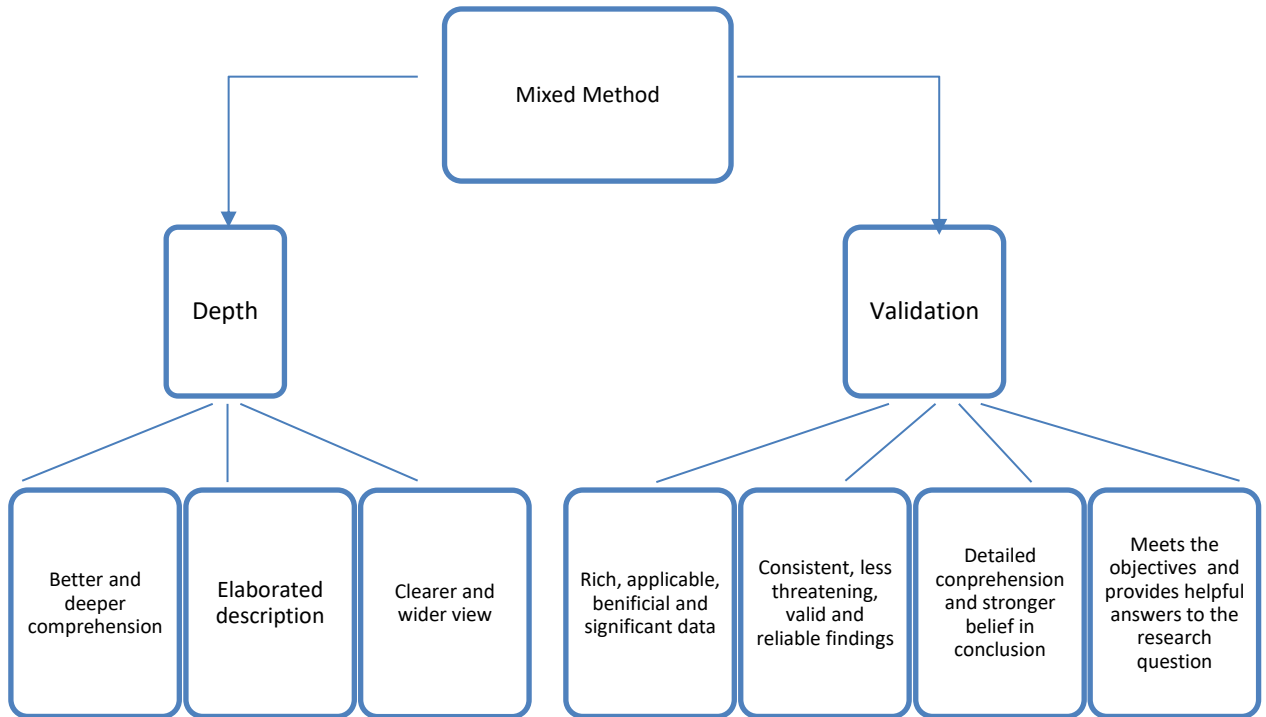


After investigating several definitions of the mixed methods, their traits and

characteristics, Johnson et al. (2007) offered the following definitions:

Based on our analysis of the definitions in Table 1, we offer the following general definition:

> Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and collaboration. (Johnson et al., 2007, p.123)

This definition refers to mixed methods research as a type of research:

> A mixed-methods study would involve mixing within a single study; a mixed-method program would involve mixing within a program of research and the mixing might occur across

a closely related set of studies. (Johnson et al., 2007, p.123)

According to Creswell, Klassen, Clark and Smith (2011), the mixed method is a methodology of work used by researchers who gather data and information depending on the nature of the research question; they collect purposely essential and valuable qualitative and quantitative data and combine them to answer the research question.

Johnson et al. (2007), identified three different types of mixed methods, the "equal status" which considers the meeting point between both quantitative and qualitative methods as its main concern, the "qualitative dominant mixed method" which is based on qualitative analysis but adds some quantitative data and approaches that help the project, and the "quantitative dominant data analysis" in which the research relies on quantitative data but add essential qualitative ones.

According to Creswell (2003) and Creswell et al. (2011), the mixed method is vital in the following cases:

- A complex research question in which the quantitative and qualitative methods cannot succeed in answering it each alone and need to be combined as a research instrument.

- An aim to have a broad view and multiple perspectives regarding a specific problem.

- A need to develop a more complete understanding of a certain topic through analyzing, validating, and comparing results to inspect tendencies, and procedures with consequences.

- An intention to have a sequential database in which one is built depending on the other's content.

- A search for pragmatism which means the freedom of choosing different methods, the refusal of committing to a set system or to view the world from one perspective, the

intention to reflect the reality and solve the research problem without extracting it from its social and political contexts.

This thesis intends to describe the problem of dropout in detail by clarifying its reasons and showing their relation to current social, economic, and managerial settings. This project aims to listen to different points of view and perspectives to analyze and compare data and findings to come up with valid and trustworthy conclusions and applicable solutions. Consequently, based on the needs of the research question, the objectives, and targets of this study, this thesis is framed into the mixed method thus will combine both quantitative and qualitative analyses.

According to Creswell (2003), the mixed method works in three different procedures or strategies: sequential, concurrent, or transformative. The first one consists of expounding the findings of one method (qualitative or quantitative) through using the other, the second involves collecting data simultaneously using the two methods and then assimilating them for the sake of the research question, and the third consists of setting a data collection plan and adapting it depending on the interests of the researcher and the study objectives, such a method can contain both previous strategies. The mixed-method approach used in this study will develop procedures of data collection depending on the transformative strategies which are viewed as the most malleable to reach the anticipated outcomes.

## 3.3.2.2 Methods

Keeping in mind that this investigation is framed into the mixed-method approach, this part offers a better understanding of the quantitative and qualitative phases. Each of

the methods has a unique paradigm, different assumptions, knowledge, and exploring

techniques related to a certain reality (Sale, Lohfeld, & Brazil, 2002).

- **Qualitative Methods**

Based on Creswell (2003) study of qualitative theory, the knowledge assumptions of

researchers who carry out qualitative analysis are either "Socially Constructed" or

"Advocacy/Participatory". The first aims at explaining situations based on the views

and perspectives of different participants through interacting with them and relating

their experiences to social, cultural, and historical events; in this case, the researcher

adds his interpretation of the topic which is affected by the context of the situation and

by his personal experience (Sale et al., 2002). Throughout the qualitative analysis,

researchers usually generate a theory during the study and not in the beginning which

means that they shape a non-existing, new reality (Creswell, 2003; Sale et al., 2002).

According to Sale et al. (2002), such a method shows the existence of multiple realities

depending on one's experience, and such realities are "socially- constructed" and in

continuous change. The second claim is mostly concerned with raising the voice of the

marginalized people through setting an agenda of actions that motivate the participants

to be personally engaged to change their oppressing situations (Creswell, 2003).

Carrying out qualitative analysis means implementing the following strategies for data

collection: ethnographies through studying an ethnic intact group for a period of time

(Creswell, 1998), grounded theory by originating an abstract claim based on observing

a group (Strauss & Corbin, 1990, 1998), case studies through collecting detailed data

about any topic in a limited time and place (Stake, 1995), phenomenological research

by carrying out studies to understand life phenomena from the participants'

perspectives through developing group relationships and sharing one's personal experience too (Moustakas, 1994; Nieswiadomy, 1993), and narrative research which is about combining views between the researcher's life and the ones of the participants based on the personal information they give (Clandinin & Connelly, 2000) (as cited in Creswell, 2003). The Qualitative method allows the researcher to collect open-ended data to develop themes (Creswell, 2003). The target from the qualitative phase throughout this study is to collect meaningful data with important information (Sale et al., 2002) from a limited number of participants who are in decision-making positions.

Corbin and Strauss (2015) developed several ways to analyze data qualitatively including questioning, making comparisons, thinking about the various meanings of a word, using the flip-flop technique, making life of life-experience, waving the red flag, looking at languages, looking at emotions that are expressed, looking for words that indicate time, thinking in terms of metaphors and similes, looking for the negative case, or using other analytical tools.

According to Corbin and Strauss (2015), questioning data can take place through several types of questions; sensitizing questions looking for the deep sense of the data, theoretical questions trying to find the relation between data, practical questions helping to direct the theoretical sampling, and guiding questions supporting to guide and examine the data. Making comparisons can take place in two different ways: constantly and theoretically. Constant comparisons consist in comparing one piece of the datum to another throughout the analysis; as for theoretical comparisons, they consist in comparing a concept taken for the data to another in the literature or real life without intention to include it in the findings; the aim of using theoretical comparisons

is to take distance from the data to make it more understandable and clearer. After conducting tools like interviews, the researcher must also think of the different meanings of the words to interpret them correctly and understand the message of the participants clearly. As for the flip-flop technique, it consists of thinking of the opposite concept or statement to understand all the features of the studied one. When analyzing qualitative data, researchers can relate the concept studied to their life experience to understand more the position of the participant, they must always be aware of the biases and personal assumptions of the participants when speaking about a topic and they must always question their extreme responses through waving an abstract "red flag" in their minds. In addition, another qualitative analysis strategy is looking for expressive language and emotions of the participants to use them as research "codes". Moreover, strategies as looking for time expressions to relate conditions to time, understanding the metaphors and similes used by participants to understand their perception of the situation, and observing negative cases to show an opposite or different interpretation of data can be useful qualitative analysis strategies. Some additional strategies include answering questions as "So what?" and "What if?" to gain supplementary understanding and checking the flow of events to look for gaps.

Qualitative Content Analysis is used in this study to analyze the data collected from document analysis and interviews. Qualitative content analysis is a method of data analysis that can analyze numerical data and texts. According to Mayring (2014), "qualitative content analysis is not a rigidly delineated technique, but a process in which new decisions regarding the basic procedure and individual stages of analysis constantly have to be made". Qualitative content analysis allows a systematic study of

qualitative data within their context of communication; the researcher starts the

analysis by founding the process and steps to follow based on some "systematic and

tested rules", these processes should be adapted depending on each content, similarly

to the integration of the "three base techniques" - summarizing, explication and

structuring (Mayring, 2014).

**Summary:** The object of the analysis is to reduce the material in such a way that the
essential contents remain, in order to create through abstraction a comprehensive
overview of the base material which is nevertheless still an image of it.
**Explication:** The object of the analysis is to provide additional material on individual
doubtful text components (terms, sentences...) with a view to increasing
understanding, explaining, interpreting the particular passage of text.
**Structuring:** The object of the analysis is to filter out particular aspects of the material,
to give a cross-section through the material according to pre-determined ordering
criteria, or to assess the material according to certain criteria.

Qualitative content analysis provides definitions for the "content analytical unit" used

to collect data such as interviews, documents, etc., which allows the researcher to

know previously how to approach the material, which parts to analyze, in which order,

and what "conditions must be obtained for an encoding to be carried out" (Mayring,

2014).

Another feature of the qualitative content analysis is the importance of the formation

of categories that reflects the objectives of the research, facilitates its reconstruction,

and allows a comparison of findings and a reliability evaluation (Mayring, 2014).

Moreover, some quantitative projections of frequencies and statistics can be

considered as a support for this method of analysis, in case it is significantly used.

For content analysis "inter-coder reliability … is of particular significance", is the

process by which two or more independent coders approve the coding of the content

of interest using the same code scheme which is considered as a sign of reliability and a quality criterion (Mayring, 2014).

The main inference from using qualitative content analysis is to focus on the effect of the content; on the deductions made from the analysis and their relation to the topic of dropout.

- **Systematic Procedure of Qualitative Content Analysis**

It is essential to begin the qualitative content analysis by deciding the "unit of analysis" which can be a coding unit, a content unit, or a recording unit (Mayring, 2014).

. The **coding unit** determines the smallest component of the material which can be assessed and what the minimum portion of the text is which can fall within one category.
. The **context unit** determines the largest text component, which can fall within one category.
. The **recording unit** determines which text portions are confronted with one system of categories.

Mayring (2014) also suggested two types of category development, inductive and deductive. The first one starts with formulating categories based on the material, proving or updating these categories throughout the analysis, and then interpreting the results after confirming the reliability of the categories. The second one begins with a "prior formulated, theoretically derived aspects of analysis" that is linked to the material through the formation of categories from which derive the codes that are later verified before the verification of results.

Although Mayring (2014) made it clear that the application of qualitative content analysis varies depending on the material, he presented the following "general

procedural model" which structures the procedure to be followed by the researchers

and allows more organization and precision.

**FIGURE 14.** *THE GENERAL PROCEDURAL MODEL OF QUALITATIVE CONTENT ANALYSIS (MAYRING, 2014)*

| |
|---|
| Definition of the material |

| |
|---|
| Analysis of the situation of origin |

| |
|---|
| Formal characteristics of the material |

| |
|---|
| Direction of the analysis |

| |
|---|
| Theoretical differentiation of sub-components of the problem |

| |
|---|
| Determination of techniques of analysis and establishment of a concrete procedural model |

| |
|---|
| Definition of content analytical units |

| |
|---|
| Analytical steps taken by means of the category system: Summary/ Inductive category formation; explication/context analysis; structuring/deductive; mixed |

| |
|---|
| Re-checking the category system by applying it to theory and material |

| |
|---|
| Interpretation of the results in relation to the main problem and issue |

| |
|---|
| Application of content-analytical quality criteria |

- **Quantitative Methods**

The Quantitative theory which is also known for its "Postpositivist" claims, is based on scientific studies that reflect the reality objectively through careful observations, independently from human insights (Creswell, 2003; Sale et al., 2002). The researcher comes out with a narrow hypothesis based on discrete variables, sets a strategy to collect data that either supports or disproves the theory, and then goes on to additional revisions before experimenting again (Creswell, 2003). Recent studies have shown that quantitative studies have managed to deal with complex research questions with multiple variables using several instruments that assess attitudes as real-life experiments with random and non-random subjects and designs (Keppel, 1991), surveys with questionnaires, and organized interviews (Babbie, 1990), etc. The main intentions when carrying out quantitative analysis is to generalize the findings based on the large sample sizes and to achieve unbiased results based on numerical observations and statistical data as is the target of the quantitative phase in this study (as cited in Creswell, 2003; Sale et al., 2003). The quantitative analysis of the current research aims to deal with some complex research questions on higher education dropout in Catalan public universities by studying different variables and analyzing them objectively.

Although the two methods, qualitative and quantitative, are dissimilar, they both work on refining our understanding of the world and finding practical ways to improve human circumstances (Sale et al., 2002). However, Sale et al. (2002) suggested using different labels that point at the method used for the different phenomena of the same

study when applying simultaneously or consequently the quantitative and qualitative paradigms to eliminate the confusion. This piece of advice will be applied throughout this research.

According to Fraser Health Authority (2011), data can be analyzed quantitatively through "Thinking in Numbers" which is either a numerical classification of factors observed through assigning a certain value to each factor, categorizing the factors through numbering different categories to simplify their distribution; or the classification of factors based on different measurements as degree, length, frequency, strictness, etc. When analyzing, the researcher must consider two types of variables: "independent" and "dependent". The first type affects other variables and can either be "active" that is allocated by the researcher or "attribute" that is already existing; as for the second, it is usually affected by the first and can be the outcome of the study (Fraser Health Authority, 2011). To measure these variables, there are four different levels of quantitative measurement as presented in Fraser Health Authority (2011):

- Nominal categories include category titles and cannot be placed in order.

- Ordinal categories are presented in order but without a specific interval.

- Interval categories have equal distance between them.

- Ratio categories are based on an interval scale.

- **Linear Multiple Regression Analysis in Quantitative Data Analysis**

  Multiple linear regression models are used to study the linear relationship between a variable to be explained or dependent and several explanatory or independent variables by fitting a linear equation to the observed data samples (Coelho-Barros et al., 2008).

  The general form of the linear regression model is :

$$y_i = a_0 + a_1 x_{1i} + a_2 x_{2i} + \cdots + a_k x_{ki} + \varepsilon_i \qquad i = 1,2 \dots, N$$

Knowing that y is the dependent variable or variable to be explained and x are the independent variables or explanatory variables, n represents the sample size and finally i represents the error committed by the model for each value of y. The fit is performed by minimizing the sum of the squared vertical deviations of each data point to the line that best fits the observed data (Ferraro & Giordani 2012, Kovdienko et al., 2010, Bou Nader, 2017). We use a "stepwise" regression procedure to select the independent variables that will result in the best possible model while ensuring statistical significance of the results. The t-statistics were used to test whether a particular variable contributes significantly to the regression model or not to eliminate statistically insignificant variables. The level of significance (α) for inclusion of a variable in the model was 0.05. In their book (Data Analysis, P.163) Cariccano, Poujol, and Bertrandias (2010) state, "the stepwise method is a combination of top-down and bottom-up methods, it is generally recommended as the best method for multiple linear regression."

- **Correlational Analysis in Quantitative Data Analysis**

In probability and statistics, the correlation between several random or statistical variables is a notion of connection that contradicts their independence.

This correlation is very often reduced to the linear correlation between quantitative variables, i.e. the adjustment of one variable with respect to the other by an affine relation obtained by linear regression. For this purpose, a linear correlation coefficient is calculated, which is the quotient of their covariance and the product of their standard deviations. Its sign indicates whether higher values for one correspond "on average"

to higher or lower values for the other. The absolute value of the coefficient, always between 0 and 1, does not measure the intensity of the linkage but the preponderance of the affine relationship over the internal variations of the variables. A zero coefficient does not imply independence, because other types of correlation are possible.

According to Cohen (1988), Pearson's test of dependence allows us to verify if there is a significant dependence between two quantitative variables and if so, this test allows us to verify the strength and direction of the correlation between the two variables considered.

Through combining document analysis, interviews, and surveys, the mixed-method approach used in this study would offer a better understanding of dropouts in higher education through joining both qualitative (meaning-based strategies) and quantitative (numerical strategies) data. The interviews would complement the documents presented by the institutions by concentrating on the perspectives, believes, attitudes, etc. of the management teams in the faculties of education in UB and UAB. As for the surveys, they would complement the interviews by focusing on the features, ideas, expectations, visions, course choice, etc. of the students before and after enrollment which would help in clarifying the antecedents of dropout and evaluating the practical prevention solutions. Quantitative data would help in validating the findings of the qualitative data, and in producing an in-depth understanding of the antecedents of dropout in addition to its social and cultural aspects.
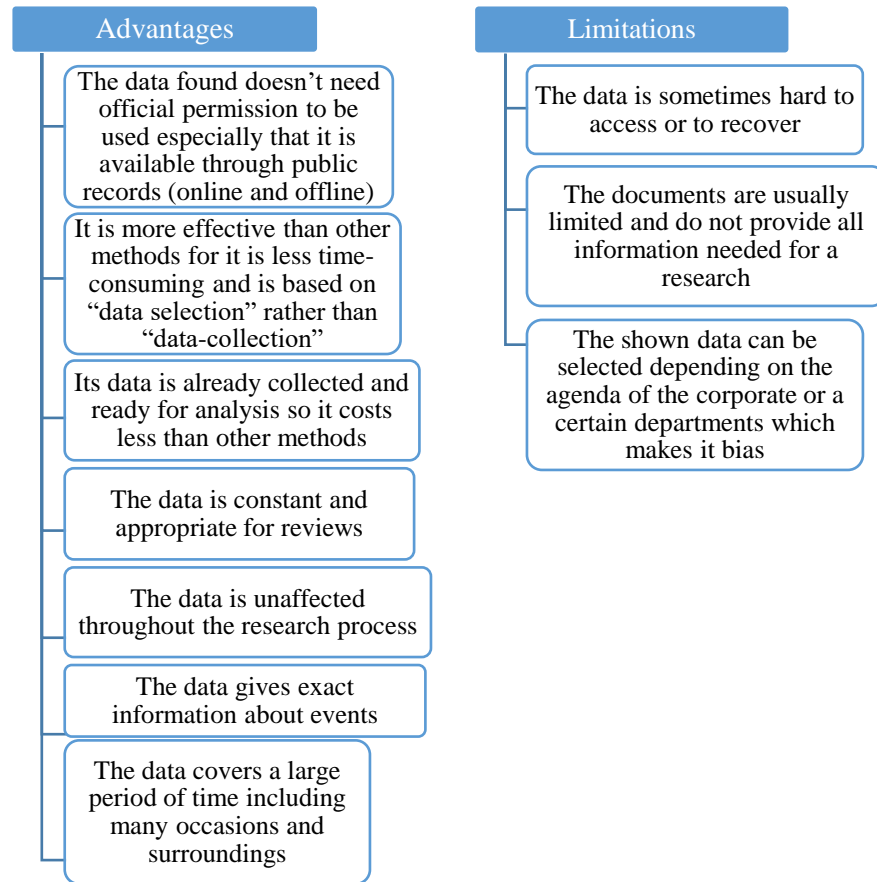
### 3.3.2.3 Instruments

This part describes the three instruments used to collect data which are document analysis, interviews, and surveys. The content includes a description of the procedures and rules followed when conducting each of the instruments, their benefits, and drawbacks, in addition to a portrayal of the samples used. Moreover, this part will project the kind of analysis that will be used to examine the data.

- **Document Analysis**

Bowen (2009) adapted the definitions of Corbin and Strauss (2008) and Rapley (2007) who considered document analysis as a structured procedure to observe and evaluate systematically the content of both printed and digital data from sources as background papers, maps, and charts, press releases, surveys, organizational and institutional records, and several others, to gain an understanding of a certain topic. According to Bowen (2009), this instrument has five specific functions; contextualizing data in their historical background and the conditions that surrounded the topic, leading to a new set of questions and observations that can help the research, providing material and understandings that can be a valuable addition to knowledge ground, examining and comparing the growth and change of a certain program over time, and authenticating outcomes or evidence from other sources to plan further steps to reach credibility. Atkinson and Coffey (1997, 2004) counsel researchers on the importance of treating document analysis seriously and wisely no matter how "official" they seem, they should not be considered as "a firm evidence of what they report" (as cited in Bowen, 2009). Document analysis similarly to any other data collection instruments has benefits and drawbacks as projected in the following graph based on Bowen (2009).

FIGURE 15. *THE ADVANTAGES AND LIMITATIONS OF DOCUMENT ANALYSIS AS A RESEARCH METHOD.*

**Advantages**

- The data found doesn't need official permission to be used especially that it is available through public records (online and offline)
- It is more effective than other methods for it is less time-consuming and is based on "data selection" rather than "data-collection"
- Its data is already collected and ready for analysis so it costs less than other methods
- The data is constant and appropriate for reviews
- The data is unaffected throughout the research process
- The data gives exact information about events
- The data covers a large period of time including many occasions and surroundings

**Limitations**

- The data is sometimes hard to access or to recover
- The documents are usually limited and do not provide all information needed for a research
- The shown data can be selected depending on the agenda of the corporate or a certain departments which makes it bias

This study uses document analysis to analyze the numeric longitudinal data available for the public received from both UAB and UB.
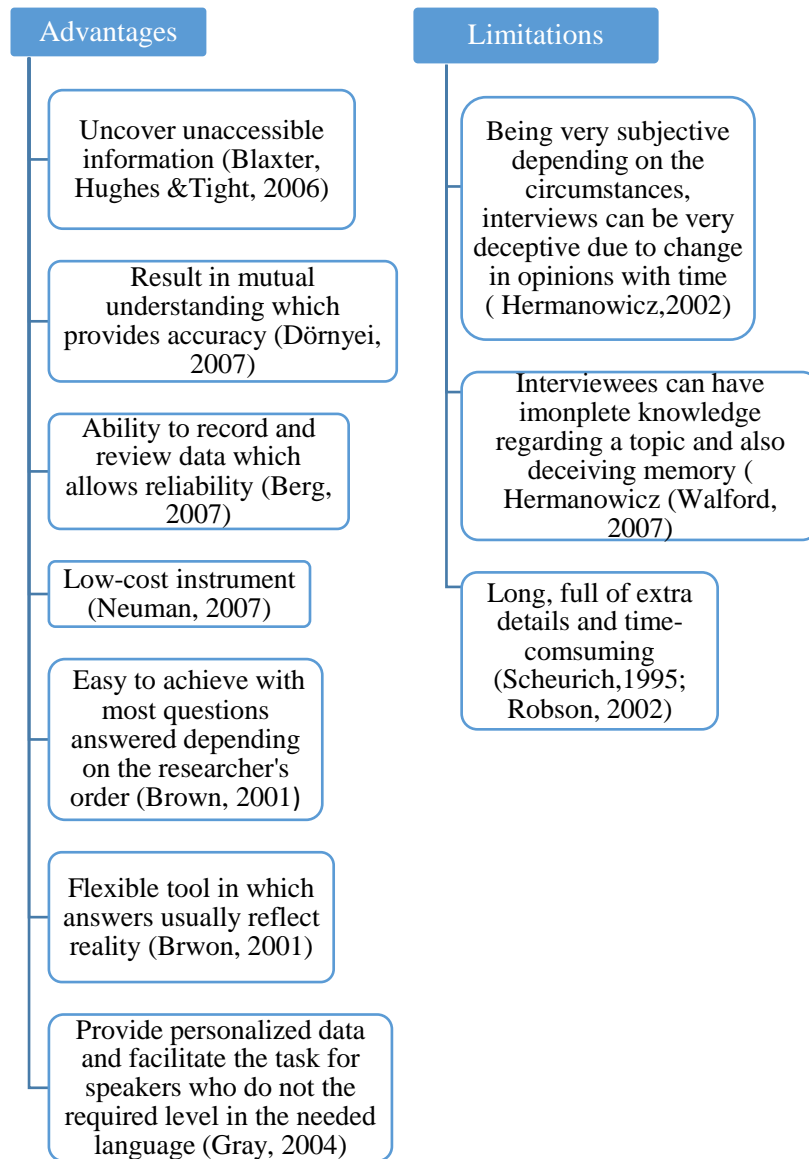
- **Interviews**

According to Brown (2005) and Kvale (1996, 2003), interviews allow researchers to investigate the experience, and thoughts of interviewees qualitatively and "in-depth" regarding a certain topic (as cited in Alshenqeeti, 2014). According to the definition of interviews from several researchers' points of view, throughout this research

instrument, participants use their voice and reflect their natural surroundings and social life throughout their answers usually without being restricted with a controlled and limited structure; however, researchers must choose the content of their questions wisely to make them explanatory, thoughtful and critical (Alshenqeeti, 2014). Based on the descriptions of several researchers to this research tool, Alshenqeeti (2014) distinguishes between four types of interviews: structured interviews with limited answers options, open-ended interviews which give flexibility and freedom for both interviewee and interviewer, semi-structured interviews which combines both limited and unlimited questions, and focus groups interviews in which participants are wisely selected to represent a certain sample of people. In her paper, Kajornboon (2005), replaced the last type of interviews, focus group interviews, with non-directive interviews in which questions are not pre-arranged; the interviewer prepares questions on the spot depending on the direction taken by the interviewee. Alshenqeeti (2014) referred to Dörnyei (2007), Richards (2003), Barbour and Schostak (2005), Berg (2007), Talmy (2010), and Creswell (2009) to enumerate the rules of conducting a successful interview. According to them, a good interview should lead to a natural process of questions and replies, should be full of important details, and wisely set to provide comfort for the interviewee which helps in receiving particular information. It should also be based on a balanced relationship between both sides (interviewer, interviewee) through listening well and giving value to the importance of the interviewee's words; showing objectivity, precision, and morality; declaring the truth as it was said; and using short questions that allow long and free answers (as cited in Alshenqeeti, 2014). Also, it is recommended to avoid asking several personal details, to always leave time for comments and additional questions at the end of the interview,

to express gratitude for the time given, and to make sure one has practiced well to review the content and efficiency of the interview (as cited in Alshenqeeti, 2014). Furthermore, Kajornboon (2005) cited Gillham (2000) who believes in the importance of introducing the theme, the reasons, the length, and the time and place of the interview to the interviewee before conducting it to allow the interviewee to be ready and relaxed.

Relying on several researchers, Alshenqeeti (2014) and Kajornboon (2005), discussed the advantages and disadvantages of interviews which will be projected in the following figure.

**FIGURE 16.** *THE ADVANTAGES AND LIMITATIONS OF INTERVIEWS BASED ON ALSHENQEETI (2014) AND KAJORNBOON (2005).*

| Advantages | Limitations |
|---|---|
| Uncover unaccessible information (Blaxter, Hughes &Tight, 2006) | Being very subjective depending on the circumstances, interviews can be very deceptive due to change in opinions with time ( Hermanowicz,2002) |
| Result in mutual understanding which provides accuracy (Dörnyei, 2007) | Interviewees can have imonplete knowledge regarding a topic and also deceiving memory ( Hermanowicz (Walford, 2007) |
| Ability to record and review data which allows reliability (Berg, 2007) | Long, full of extra details and time-comsuming (Scheurich,1995; Robson, 2002) |
| Low-cost instrument (Neuman, 2007) | |
| Easy to achieve with most questions answered depending on the researcher's order (Brown, 2001) | |
| Flexible tool in which answers usually reflect reality (Brwon, 2001) | |
| Provide personalized data and facilitate the task for speakers who do not the required level in the needed language (Gray, 2004) | |

This study uses interviews as a research instrument due to their numerous advantages as recorded material. Interviews allow this study to review the conversation between the two sides, reexamine the content and receive personalized responses based on the interviewees' experience, situation, and current context regarding the topic targeted.

- **Surveys**

Surveys are considered very popular research methods. This chapter defines surveys as a means to collect data from people through receiving their answers to specific questions; surveys are considered very efficient to researchers especially that they allow measuring multiple variables and they can be a relying method that reflects a large population (Check & Schutt, 2012). There are several crucial rules to follow when planning a survey to prevent errors. The first is conducting attentive observations to measure well all the features of a successful survey, the second is non-neglecting important cases to avoid poor choices in sampling and high rate of nonresponses, and the third is preserving focus on the research problem, its key features, and purpose. In addition, it is crucial to design the questions and refine them systematically to limit the use of unnecessary words, imprecise answers, and errors, to take into consideration previous surveys and suggested questions of researchers in case they fit the purpose of the study, and finally to test your questions before conducting the survey, making sure they are unambiguous, well-ordered, and presented pleasantly (Check & Schutt, 2012). Similarly, to the previous research instruments, surveys have advantages and disadvantages.

**FIGURE 17.** *THE ADVANTAGES AND LIMITATIONS OF SURVEYS ARE BASED ON CHECK ET AL.(2012).*
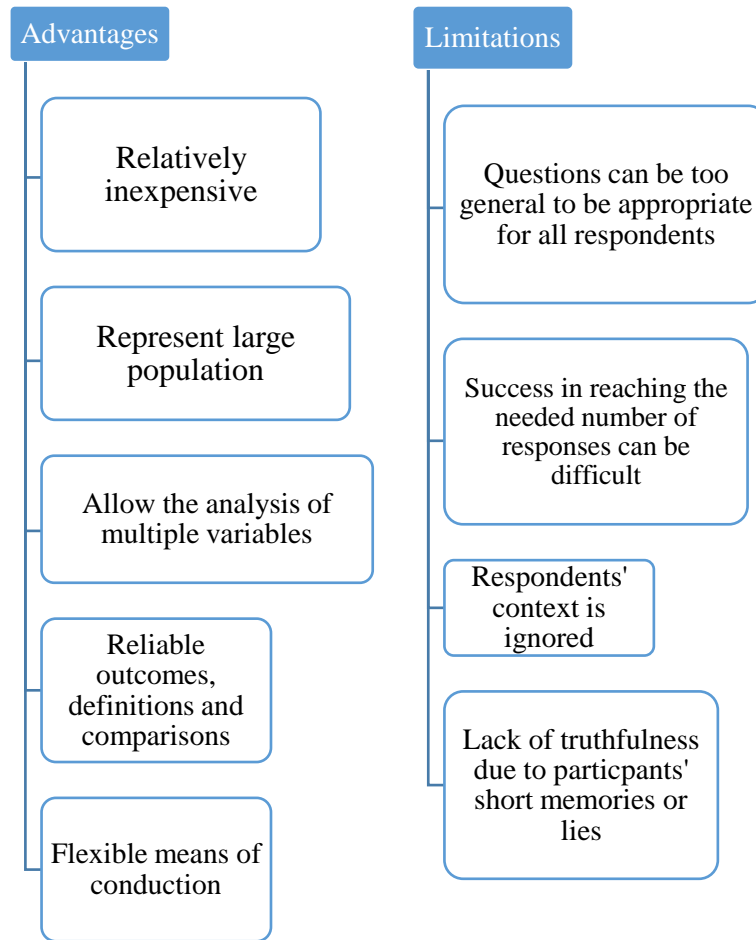
### 3.2.2.4 Sample

- **Document Analysis Sample**

The data selected from the document received from UAB includes the number of new students registering in the four different programs between academic years 2009/2010 and 2017/2018, the evolution of the general number of students matriculated between academic years 2009/2010 and 2017/2018, and the number of students dropping out between academic years 2010/2011 and 2015/2016. The following tables project the data received without any additional analysis.

Table 5 provides the number of new students registered for the first year in one of the study programs of the Faculty of Sciences of Education in UAB. The four programs are Childhood Education (Graduat en Educació Infantil), Primary Education (Graduat en Educació Primària), Social Education (Graduat en Educació Social), and Pedagogy (Graduat en Pedagogia). The number of new students is distributed yearly between those who registered in a full time (Dedicació a temps complet), partial time (Dedicació a temps parcial), and variable time (Dedicació a temps variable). The data also shows the evolution of the new number of students registering yearly in the different programs between academic years 2009/2010 and 2017/2018.

TABLE 5. *THE NUMBER OF NEW STUDENTS MATRICULATED BETWEEN ACADEMIC YEARS 2009/2010 AND2017/2018.*

| Codi de l'estudi | Estudi | Dedicació de l'estudiant | Curs acadèmic | Estudiants matriculats de nou ingrés | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 |
| **2500797** | Graduat en Educació Infantil | Dedicació a temps complet | | 108 | 51 | 70 | 142 | 126 | 126 | 119 | 131 | 141 |
| | | Dedicació a temps parcial | | 1 | 4 | 2 | 1 | 4 | 1 | 2 | 0 | 3 |
| | | Dedicació a temps variable | | 45 | 114 | 81 | 15 | 15 | 7 | 5 | 4 | 0 |
| | | **Total** | | **154** | **169** | **153** | **158** | **145** | **134** | **126** | **135** | **144** |
| **2500798** | Graduat en Educació Primària | Dedicació a temps complet | | 290 | 257 | 287 | 285 | 281 | 252 | 250 | 254 | 266 |
| | | Dedicació a temps parcial | | 1 | 5 | 2 | 4 | 6 | 2 | 4 | 1 | 4 |
| | | Dedicació a temps variable | | 16 | 37 | 21 | 27 | 23 | 14 | 10 | 3 | 0 |
| | | **Total** | | **307** | **299** | **310** | **316** | **310** | **268** | **264** | **258** | **270** |
| **2500260** | Graduat en Educació Social | Dedicació a temps complet | | 70 | 60 | 67 | 54 | 59 | 72 | 75 | 84 | 88 |
| | | Dedicació a temps parcial | | 0 | 0 | 4 | 2 | 1 | 3 | 3 | 0 | 0 |
| | | Dedicació a temps variable | | 11 | 27 | 22 | 26 | 30 | 17 | 6 | 2 | 0 |
| | | **Total** | | **81** | **87** | **93** | **82** | **90** | **92** | **84** | **86** | **88** |
| **2500261** | Graduat en Pedagogia | Dedicació a temps complet | | 71 | 69 | 73 | 70 | 76 | 84 | 66 | 63 | 75 |
| | | Dedicació a temps parcial | | 1 | 2 | 1 | 4 | 3 | 1 | 1 | 10 | 3 |
| | | Dedicació a temps variable | | 10 | 5 | 3 | 0 | 7 | 8 | 4 | 2 | 0 |
| | | **Total** | | **82** | **76** | **77** | **74** | **86** | **93** | **71** | **75** | **78** |
| **-1** | Graduat en Educació Infantil i Graduat en Educació Primària | Dedicació a temps complet | | 0 | 0 | 0 | 0 | 0 | 19 | 22 | 0 | 0 |
| | | **Total** | | **0** | **0** | **0** | **0** | **0** | **19** | **22** | **0** | **0** |
| | Graduat en Educació Infantil i Grau en Educació Primària | Dedicació a temps complet | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 22 |
| | | Dedicació a temps parcial | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| | | **Total** | | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **20** | **22** |

In table 6, the general number of students matriculated including the newly registered is provided for the four study programs (Childhood Education, Primary Education, Social Education, and Pedagogy) depending on the students' preferred timetable (full, partial, or variable). The table also shows the evolution of the numbers between the academic years 2009/2010 and 2017/2018.

**TABLE 6.** *The general number of students matriculated between academic years 2009/2010 and 2017/2018.*

| Codi de l'estudi | Estudi | Dedicació de l'estudiant | Nombre d'estudiants matriculats | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Curs acadèmic | 2009 /10 | 2010 /11 | 2011 /12 | 2012 /13 | 2013 /14 | 2014 /15 | 2015 /16 | 2016 /17 | 2017 /18 |
| 2500797 | Graduat en Educació Infantil | Dedicació a temps complet | 108 | 150 | 214 | 349 | 380 | 445 | 494 | 495 | 512 |
| | | Dedicació a temps parcial | 1 | 6 | 3 | 4 | 8 | 3 | 6 | 3 | 5 |
| | | Dedicació a temps variable | 45 | 159 | 237 | 247 | 227 | 138 | 68 | 49 | 31 |
| | | **Total** | **154** | **315** | **454** | **600** | **615** | **586** | **568** | **547** | **548** |
| 2500798 | Graduat en Educació Primària | Dedicació a temps complet | 290 | 523 | 778 | 1,029 | 1,034 | 1,031 | 1,017 | 998 | 990 |
| | | Dedicació a temps parcial | 3 | 6 | 2 | 6 | 8 | 8 | 8 | 6 | 6 |
| | | Dedicació a temps variable | 19 | 57 | 77 | 99 | 116 | 120 | 106 | 79 | 56 |
| | | **Total** | **312** | **586** | **857** | **1,134** | **1,158** | **1,159** | **1,131** | **1,083** | **1,052** |
| 2500260 | Graduat en Educació Social | Dedicació a temps complet | 71 | 118 | 169 | 208 | 212 | 224 | 247 | 276 | 297 |
| | | Dedicació a temps parcial | 0 | 0 | 4 | 3 | 3 | 5 | 5 | 4 | 3 |
| | | Dedicació a temps variable | 11 | 39 | 61 | 87 | 111 | 103 | 92 | 67 | 41 |
| | | **Total** | **82** | **157** | **234** | **298** | **326** | **332** | **344** | **347** | **341** |
| 2500261 | Graduat en Pedagogia | Dedicació a temps complet | 71 | 129 | 183 | 244 | 265 | 261 | 246 | 245 | 248 |
| | | Dedicació a temps parcial | 1 | 2 | 3 | 5 | 7 | 4 | 3 | 11 | 8 |
| | | Dedicació a temps variable | 10 | 15 | 18 | 16 | 27 | 30 | 29 | 30 | 24 |
| | | **Total** | **82** | **146** | **204** | **265** | **299** | **295** | **278** | **286** | **280** |
| -1 | Graduat en Educació Infantil i Graduat en Educació Primària | Dedicació a temps complet | 0 | 0 | 0 | 0 | 0 | 19 | 38 | 15 | 15 |
| | | **Total** | **0** | **0** | **0** | **0** | **0** | **19** | **38** | **15** | **15** |
| | Graduat en Educació Infantil i Grau en Educació Primària | Dedicació a temps complet | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 60 |
| | | Dedicació a temps parcial | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| | | **Total** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **40** | **60** |

Also, the UAB document includes a table that shows the numbers of students dropping out from the four programs between the years 2010/2011 and 2015/2016. Table 7 projects for each of these academic years, the number of new students enrolled in each of the programs (Estudiants matriculats de nou ingrés als estudis de grau), the number of students dropping out from the 1st year (Abandonament Grau 1er curs), the general

number of students abandoning the degree (Abandonament Grau), the number of students who abandoned university (Abandonament Universitat), and the number of students who abandoned and changed the field of study (Abandonament i canvi d'estudi).

TABLE 7. *THE NUMBER OF STUDENTS ABANDONING EACH OF THE STUDY PROGRAMS BETWEEN YEARS 2010/2011 AND 2015/2016.*

| Centre | Estudi DGU Estès | Cohort d'entrada | 2010/2011 | | | | |
|---|---|---|---|---|---|---|---|
| | | Indicadores | Estudiants matriculats de nou ingrés als estudis de grau | Abandonament Grau 1er curs | Abandonament Grau | Abandonament Universitat | Abandonament i canvi d'estudi |
| Facultat de Ciències de l'Educació | | | 631 | 67 | 120 | 109 | 11 |
| | Graduat en Educació Infantil | | 169 | 7 | 17 | 17 | 0 |
| | Graduat en Educació Infantil i Graduat en Educació Primària | | 0 | 0 | 0 | 0 | 0 |
| | Graduat en Educació Primària | | 299 | 35 | 62 | 53 | 9 |
| | Graduat en Educació Social | | 87 | 13 | 20 | 19 | 1 |
| | Graduat en Pedagogia | | 76 | 12 | 21 | 20 | 1 |
| | | | | | 2011/2012 | | |
| Facultat de Ciències de l'Educació | | | 633 | 50 | 78 | 75 | 3 |
| | Graduat en Educació Infantil | | 153 | 2 | 5 | 5 | 0 |
| | Graduat en Educació Infantil i Graduat en Educació Primària | | 0 | 0 | 0 | 0 | 0 |
| | Graduat en Educació Primària | | 310 | 21 | 36 | 35 | 1 |
| | Graduat en Educació Social | | 93 | 17 | 23 | 21 | 2 |
| | Graduat en Pedagogia | | 77 | 10 | 14 | 14 | 0 |
| | | | | | 2012/2013 | | |
| Facultat de Ciències de l'Educació | | | 630 | 44 | 86 | 77 | 9 |

| | | | | | |
|---|---|---|---|---|---|
| | Graduat en Educació Infantil | 158 | 5 | 10 | 10 | 0 |
| | Graduat en Educació Infantil i Graduat en Educació Primària | 0 | 0 | 0 | 0 | 0 |
| | Graduat en Educació Primària | 316 | 22 | 42 | 38 | 4 |
| | Graduat en Educació Social | 82 | 5 | 12 | 10 | 2 |
| | Graduat en Pedagogia | 74 | 12 | 22 | 19 | 3 |
| | | | | **2013/2014** | | |
| **Facultat de Ciències de l'Educació** | | **630** | **57** | **91** | **73** | **18** |
| | Graduat en Educació Infantil | 145 | 11 | 14 | 10 | 4 |
| | Graduat en Educació Infantil i Graduat en Educació Primària | 0 | 0 | 0 | 0 | 0 |
| | Graduat en Educació Primària | 310 | 23 | 37 | 30 | 7 |
| | Graduat en Educació Social | 90 | 6 | 12 | 12 | 0 |
| | Graduat en Pedagogia | 85 | 17 | 28 | 21 | 7 |
| | | | | **2014/2015** | | |
| **Facultat de Ciències de l'Educació** | | **606** | **54** | **73** | **52** | **21** |
| | Graduat en Educació Infantil | 134 | 8 | 11 | 10 | 1 |
| | Graduat en Educació Infantil i Graduat en Educació Primària | 19 | 3 | 4 | 2 | 2 |
| | Graduat en Educació Primària | 268 | 17 | 26 | 20 | 6 |
| | Graduat en Educació Social | 92 | 6 | 8 | 5 | 3 |
| | Graduat en Pedagogia | 93 | 20 | 24 | 15 | 9 |
| | | | | **2015/2016** | | |
| **Facultat de Ciències de l'Educació** | | **566** | **45** | **67** | **35** | **32** |
| | Graduat en Educació Infantil | 126 | 4 | 4 | 3 | 1 |
| | Graduat en Educació Infantil i Graduat en Educació Primària | 22 | 0 | 22 | 0 | 22 |
| | Graduat en Educació Primària | 263 | 18 | 18 | 15 | 3 |
| | Graduat en Educació Social | 84 | 9 | 9 | 7 | 2 |
| | Graduat en Pedagogia | 71 | 14 | 14 | 10 | 4 |

Regarding the data received from UB, it consists of three different documents for each study program. The first shows the total and the new number of students enrolled for academic years 2011/2012 till 2015/2016; the second displays the number of applications for each of the programs for the same academic years, the number of students choosing each of the programs as their primary option, the number of places offered for each program yearly, and the number of students newly enrolled; as for the third document, it presents the average note of grades for each academic year for each program. Being interested in the dropout rates or in data that can help in investigating dropout, this study will only project the first document, although it is of no use for the analysis due to its generality. Table 8 provides the total number of students enrolled in each study program for each academic year (Totals) and the number of new students enrolled for their first year in the same academic year (Nous).

**TABLE 8.** *TOTAL AND NEW NUMBER OF STUDENTS ENROLLED IN EACH STUDY PROGRAM BETWEEN ACADEMIC YEARS 2011/2012 AND 2015/2016.*

| Childhood Education | | |
|---|---|---|
| **Curs** | **Totals** | **Nous** |
| 2016 | 1024 | 246 |
| 2015 | 1051 | 251 |
| 2014 | 1056 | 258 |
| 2013 | 1001 | 254 |
| 2012 | 941 | 245 |
| **Primary Education** | | |
| **Curs** | **Totals** | **Nous** |
| 2016 | 2124 | 514 |
| 2015 | 2157 | 528 |
| 2014 | 2178 | 524 |
| 2013 | 2125 | 525 |
| 2012 | 2101 | 558 |
| **Social Education** | | |
| **Curs** | **Totals** | **Nous** |
| 2016 | 773 | 187 |
| 2015 | 778 | 187 |
| 2014 | 777 | 187 |
| 2013 | 771 | 189 |
| 2012 | 709 | 181 |

| | Pedagogy | |
|---|---|---|
| Curs | Totals | Nous |
| 2016 | 975 | 241 |
| 2015 | 944 | 234 |
| 2014 | 934 | 250 |
| 2013 | 908 | 254 |
| 2012 | 849 | 239 |

- **Interviews Participants**

Throughout the process, 16 interview requests were sent by email explaining briefly the content of the thesis, in addition to the objectives of the interview and its estimated time; once the interviews were approved and set, the interviewees received a pdf document with all the expected questions. The requests were sent to the following people depending on their positions: the deans of the faculties of education at UB and UAB, the vice-deans of academic affairs in both UB and UAB, the vice-deans of quality and innovation, students and mobility, and practicum at UAB noting that these positions do not exist at UB (review figure 12), the coordinators of the 4 study programs (Childhood Education, Primary Education, Social Education, and Pedagogy) in both UB and UAB, in addition to a neurologist expert in UAB.     10 replies were received, thus the study carried out 10 interviews with interviewees filling the following positions: the deans of UB and UAB (coded respectively as D1 and D2) , the vice-deans of academic affairs in both UB and UAB ( coded respectively as VDA1 and VDA2), the vice deans of quality and innovation (VDQI2), students and mobility (VDSM2), and practicum at UAB (VDP2), the coordinators of Pedagogy in both UB and UB (coded respectively as CP1 and CP2), and finally the coordinator of Primary Education at UAB (CPE2). It is worthy to mention that the dean and the vice-dean of

academic affairs at UB sat together for the interview which allowed them to answer one another questions in some cases. The interviews were done in Spanish since they were carried out in Spain and several interviewees were not comfortable using the English language, full interviews in the original language will be found in the USB presented with this thesis. The interviews have the following general and specific objectives:

**TABLE 9.** *THE GENERAL AND SPECIFIC OBJECTIVES OF THE INTERVIEWS.*

| General Objectives | Specific Objectives |
|---|---|
| • Identify the most frequent antecedents of students' dropout from Catalan public universities. <br> • Provide innovative solutions to reduce dropout. | • Analyze the management process of the faculty of Education and all its departments in relation to the abandonment of students. <br> • Study the behavior of students towards the university teaching staff in situations of dropout. <br> • Identify the background of dropout from the perspective of the faculty. <br> • Analyze the prevention strategies used in the education faculty. |

All the interviews were structured similarly; however, some of the content differed depending on the position of the interviewee and the researcher's objectives. The interviews were divided as followed:

**I. Personal information:** general information, academic information, professional background.

**II. Overview of the dropout:** definition of dropout, accessible records, role characteristics, related experiences.

**III. Disengagement reasons:** evaluation of the reasons for leaving higher education, analysis of student behavior, examinations of the student-personal/professors' relationship.

**IV. Retention methods practiced:** evaluation of retention methods practiced.

**V. Measures to be taken:** vision, expectations, and future demands

The first part of the interviews being about personal information was similar for all the interviewees, it included the following:

Name:_____

Edad:_____

Profession:_____          Academic Degree:_____

Current Position:_____          Current Educational Workplace:_____

Years of Experience in this Educational Institution:_____

Brief Job Description:_____

Contact Information:_____

Date & Signature:_____

The second part of the interviews was mostly the same for all the participants from both universities and it allowed the interviewees to describe freely their understanding and personal experience with dropout through the following common open-ended questions:

- Could you tell us how many years you have been in this position and briefly describe your roles?

- When I say "dropout of higher education", what do you understand? Or what do you associate it with?

- Do you have previous experience in dropout issues? If yes, in what context?

In this part, there were some questions specifically added depending on each interviewee:

**For the deans:** - As dean of the Faculty of Education, how can you describe the phenomenon of dropout in the faculty; does it happen very often or from?

**For the vice-deans of academic affairs:** - As vice-dean of academic affairs, how would you describe the students' point of view about the importance of studies?

**For the vice-dean of quality and innovation:** - As vice-dean of quality assurance, what are the quality standards used for the faculty or university? Is there any that takes into account students' dropout?
- Is the dropout is one of the criteria of quality, in what sense (number of students, quality of the programs, the professionalism of the professors, etc.)?

**For the vice-dean of students and mobility:** - As vice-dean of student affairs, how would you describe the behavior of students with respect to university studies?
- As a vice-dean of mobility, do you also know of a case in which students leave the faculty to study in another country?

**For the vice-dean of practicum:** - As a vice-dean of practicum, what are the protocols followed before assigning students to internships? Do the practices affect the grades and future of students in college?

**For the coordinators of all the study programs:** - Is it usual for students in this program to give up their studies or transfer to other programs?
**-** To what extent do you have authority over the academic behavior and achievements of students?

The third part of the interviews asked questions related to reasons that lead students to

drop out, and included the following common questions:

- From a general perspective, what are the main reasons for leaving the faculty of education:

   - Negative attitude and behavior of students, inability to adapt, and lack of self-confidence
   - Parental status of students, ethnoreligious background, historical minorities, etc.
   - Weak relationship between staff-students, teacher-students (direct communication, formal
   informal relationship, conflict zone, etc.), student-student, geographic factors, and lack of
   continuous support.

- Inability of the students to separate themselves from their comfort zone.
- Financial dependence or independence of students.
- The political environment.

Later, the following two options were added:
- Academic failure
- Deception of the program or expectations that do not match

- Are students allowed to complain and if so, to whom do they complain and how are their complaints taken into account?

As for the coming questions, they were specifically asked for the following group of people or

individuals depending on the similarities between their positions:

**For the deans and all vice-deans:** - From your previous experiences with the dropout, do you think that students usually leave voluntarily or involuntarily?
- Comparing the 4 programs of the faculty, which is the one with the lowest dropout rate and which has the highest? Do you have any idea why?
**For the deans and vice deans of academic affairs:** - How would you describe the main objective of the faculty? What value does it give to teaching among other objectives?

**For the deans:** - Do you think that the orientation in the school before the entrance to the university has an important part in the election of the university and studies? And how would you describe its operation in Catalan secondary schools?
- How does the faculty plan the content of the academic programs? Do you take into account the objectives and expectations of the students?
- Does the faculty follow the policy of dismissing students due to their academic or behavioral records?

**For all the vice-deans:** - Do you think that students are satisfied
-with the offerings of the faculty (size of the class- resources- attention-relation teacher- students etc.)?
-with your program of studies after the training?

**For the vice-deans of academic affairs:** - What are the criteria to assign the professors in their positions?
- Does the faculty consider the expectations of the students of a course and their feedback to evolve it and adapt it to their demands?
- How does the Faculty deal with programming, do you take into account students who have to work or who have some kind of family charge?

**For the vice-deans of quality and innovation, students and mobility, and practicum:** - Are all students treated equally when it comes to the process of allocation or some are more pampered than others depending on the family connections?

**For the vice-dean of quality and innovation**: - Do you follow any strategy that helps you connect with a graduate student to verify if they were satisfied with what they were taught?
-How much do you think quality (standards that you follow - curriculum) affects the persistence of students in the programs?

**For the vice-dean of students and mobility:** - Are students satisfied with their studies in Catalonia or do they prefer to study abroad?
- How do you evaluate minorities, first-generation, and integration capacity?

**For the vice-dean of practicum:** - Did you notice any change in students' options regarding their study program after doing your training? How would you explain that?

**For the coordinators of all the study programs:** - What are the criteria for accepting students in this program?
- Do you think that the study program meets the expectations of the students? How do you evaluate the study program and the courses? And how to deal with the world updates?

Following this part comes the fourth part which tackled the already implemented retention

strategies to avoid dropout. This part included the following open-ended questions:

**For the dean:** - As dean of the faculty, how do you collect information and access student information to locate problem students before and during the academic year? and how do they communicate with the vice-deans and coordinators?
- How is the monitoring of the trajectory of the students in the program? Do you follow the strategy of dropout predictors?
- What are the methods/measures applied to prevent students from leaving the program (financial, psychological, academic, and organizational)?
- Are you adapting the methods or strategies suggested by the general government or by Catalan to reduce the dropout? Does the State offer sufficient funds to help students in need and to help future researchers? How does the university distribute financial support; loans, grants, jobs? Do you take into account the background of the students or the academic transcript?

**For the deans, vice-deans of academic affairs, students and mobility, and practicum:** - Does the faculty offer guidance and counseling seminars or support to follow-up students before and during registration?

**For the deans and vice-deans of quality and innovation:** - Does the faculty provide ongoing training to its staff to provide the best services (academically and administratively) for the students?

**For all the vice-deans and coordinators:** - Do you have access to the students' academic records?

  - before entering (high school grades, language skills, family history, psychological status, etc.)

  - during (in case a student has a problem)

  How are you informed about them?

  What are the communication channels you use to inform coordinators about problematic cases?

- What are the methods/measures applied to prevent students from leaving the program (financial, psychological, academic, and organizational)?

**For all vice-deans:** - What are the implemented programs that are used to improve participation in the university (interest groups, summer programs, teaching process, etc.)

**For the vice-deans of academic affairs**: - Do you have a program that increases the civic participation of students?

**For the vice-dean of quality and innovation:** - Do the institutions you work with provide students with rewards during their training?

**For the vice-dean of students and mobility:** - What are the implemented programs that are used to improve participation in the university (interest groups, summer programs, teaching process, etc.)

- How are students with psychological problems detected and supported? Is there a system of tutoring or counseling to help them?

**For the coordinators of all the study programs:** - How do you track the record of the students in the program monitored? Do you follow any strategy of dropout predictors?

- What kind of specific support do you offer the students during their studies (counseling, tutoring, support for studies, tutoring, summer programs, study skills workshops, language courses, first-year seminars, awards, etc.)?

- How are the students advised and supported during their studies?

The last part of the interview was opened for any new suggestions and propositions to decrease

dropout rates, it included the following common questions:

**For the deans:** - What kind of new measures are you considering to decrease the dropout? And who do they involve: students, teachers, administration, parents, etc.?

- Is the state/municipality planning to offer more help to public universities to decrease the dropout (funds, strategic support, and awareness)?

- Would you like to add something?

**For all the vice-deans and coordinators of study programs:** - What can be done to improve the academic issues in the faculty and to diminish its effect on the dropout? - Would you like to add something?

**For the vice-deans of academic affairs, quality, and innovation**: - What can the faculty or university do to empower the staff more and allow them to help the students?

**For the vice-dean of students and mobility:** - How can the process of student mobility be improved to give all students equally an international experience?

Table 14 provides some personal, academic, and professional information about the 10 interviewees who are managing the faculties of education at UAB and UB. As obvious, most of them have a remarkable experience at the same university, hold academic titles, and are experts in the field of education. Moreover, more than half of them have around 2 years of experience only in their management positions which limits their responsibility to these years and gives them the opportunity to improve and change strategies and policies in the coming years.

The average age of the interviewees is around 50 years old which infers that the faculties are managed by an average-age generation which the study hopes that it will be open to new concepts, constructive criticism, and innovative ideas.

**TABLE 14.** *GENERAL INFORMATION ABOUT THE INTERVIEWEES*

| Faculty of Education | Position | Codes | Interview codes (Int.) | Age | Profession | Academic title | Years of experience in the university | Years of experience in this position |
|---|---|---|---|---|---|---|---|---|
| UAB | Dean | D2 | Interview 1 | 65 | Pedagogue | Doctor in Pedagogy | 37 | 5 |
| UB | Dean | D2 | Interview 2 | 52 | Professor | Doctor | 28 | 3 years and a half |
| UAB | Vice dean of academic affairs | VDA2 | Interview 3 | 41 | Professor | Doctor in didactical sciences | 14 | 2 |
| UB | Vice dean of academic affairs | VDA1 | Interview 4 | 53 | Professor | Doctor | 17 | 3 years and a half |
| UAB | Vice dean of quality and innovation | VDQI2 | Interview 5 | 56 | Professor | Doctor | 10 | 3 |
| UAB | Vice dean of students and mobility | VDQI1 | Interview 6 | 48 | Professor | Doctor in Social Anthropology | 21 | 2 |
| UAB | Vice dean of practicum | VDP2 | Interview 7 | 41 | Professor | Doctor | 16 | 2 |
| UAB | Coordinator of Primary Education | VDPE2 | Interview 8 | 40 | Professor | PhD in Education | 9 | 1 year and a half |
| UAB | Coordinator of Pedagogy | CP2 | Interview 9 | 48 | Professor | Doctor | 4 | 2 |
| UB | Coordinator of Pedagogy | CP1 | Interview 10 | 54 | Pedagogue and Professor | Masters | 25 | 2 |

- **Survey Sample**

The survey conducted in this study intends to explore the students' point of view regarding their study programs, and support offered by their university and faculty. The targeted audience is the students enrolled in any of the four study programs of the faculties of Education in both UB and UAB.

Due to students' data protection policies, students' contacts were unreachable and unavailable for the study; however, after getting the dean's permission at UAB and the support of some professors in both universities, the survey was conducted in the classes through a link, a QR code or hard copies. The official language of the survey is Spanish to make it understandable to all participants, it contains 49 questions and it starts with an introductory and explanatory paragraph. After that, comes several multiple-choice and open-ended questions regarding the students' study programs and sociodemographic backgrounds. Then, follow the rating-scale questions to check the students' rate of satisfaction towards their study program, professors, tutors, administration, support, etc. Also, there are some multiple-choice and open-ended questions to examine the students' awareness regarding the topic of dropout, their relationship with the support programs offered by the university and faculty, and their view and future vision towards the major they have chosen. At the end of the survey, the students are given the choice of whether to leave their contact or not to participate in the advanced steps of this study. The students have most of the time the option to write any other choice or any additional comment. The following section projects the content of the survey:

**"Analyzing the Antecedents of Higher Education Dropout and Identifying some**

**Prevention Solutions"**

Dear Student,

My name is Hind Naaman, I am a second-year Ph.D. student at the UAB and I am carrying out the thesis entitled "Analyzing the Antecedents of Higher Education Dropout and Identifying some Retention Solutions".

The purpose of my study is to analyze the phenomenon of abandonment and to think about some innovative strategies that diminish this one and help the students.

The completion of the doctoral thesis includes a phase of data collection on the status of studies in the field of education. With this objective, I would like to ask you to respond to a brief survey of about 15 minutes. Your opinion will help us to improve the programs of the Faculty of Educational Sciences and give personalized attention to the students in a situation of abandonment.


**1. University:**
UB
UAB

**2. Study Program / Degree:**
Early Childhood Education
Primary education
Social education
Pedagogy

**3. Year in Progress:**
1st
2nd
3rd
4th

**4. Which group are you in?**

**5. When did you start studying at the UAB?**
Year 2010-2011
Year 2011- 2012
Year 2012-2013
Year 2013- 2014
Year 2014-2015
Year 2015-2016

Year 2016-2017
Year 2017-2018

**6. When have you started your current specialization?**
Year 2010-2011
Year 2011- 2012
Year 2012-2013
Year 2013- 2014
Year 2014-2015
Year 2015-2016
Year 2016-2017
Year 2017-2018

**7. Age**
Less than 23 years
Between 23 and 25 years
More than 25 years

**8. Number of credits approved during the studies:**

**9. Number of credits enrolled in total since you have started studying:**

**10. Part-time work**
Yes
No

**11. Class Shift**
Morning
Late

**12. I am a first-generation university student in my family**
Yes
No
Other (specify)

**13. I received some type of orientation in high school before choosing the career**
Yes
No
Other (specify)

**14. I received enough information before registering for the major**
Yes
No
Other (specify

**15. I am satisfied with the program offered by the faculty that meets my expectations**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**16. I am satisfied with the content of the courses**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**17. I am satisfied with the administrative support offered to students**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**18. I consider the faculty programs updated**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**19. How would you evaluate the performance of the teachers**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**20. The faculty has effectively responded to your academic complaints**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**21. There is a communication of messages between teachers and students**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**22. In the face of academic difficulties, does the faculty have mechanisms and processes to help resolve doubts?**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**23. In the face of personal difficulties, does the Faculty have mechanisms and processes to help resolve doubts?**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**24. In the face of logistical difficulties (accommodation, transportation, etc.), does the Faculty have mechanisms and processes to help resolve doubts?**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**25. How would you describe the study environment?**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**26. How would you evaluate the financial support (scholarships) offered to students by the state?**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**27. How would you evaluate mobility scholarships offered to students?**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**28. Once I finish my studies, I will be well prepared for the job**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**29. How would you consider the practicum centers with which the faculty collaborates?**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**30. Was my practicum experience satisfactory?**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**31. How would you evaluate the work of university tutors?**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**32. How would you evaluate the work of the practicum tutors?**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**33. My personal effort to study at home is ...**
Unacceptable
Needs improvement
Satisfactory
Excellent
*Why? (Specify)*

**34. I consider that my academic performance is ...**
Unacceptable
Needs improvement
Satisfactory
Excellent
*Why? (Specify)*

**35. My attendance at the different extracurricular activities organized by the university is**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**36. How do I evaluate my parents' support to carry out my studies?**
Unacceptable
Needs improvement
Satisfactory
Excellent
Other (specify)

**37. Have I ever thought about leaving?**
Yes
No
*Why?*

**38. Have I ever thought about changing careers?**
Yes
No
*In case yes, why and what would you like to do?*
*In case NO, what do you like most about your career?*

**39. Do you know any type of programs the university offers to help students? Select from the following listing.**
PIUNE
Psychology and Speech Therapy Service (SPL)
Language Self-Learning Center
Professional sportsmen

Health care service
Network services
Employability Service
I work overseas
Other (please comment)

**40. Why do you think that students leave or change careers? List the 4 most important ones.**
Financial problems
Job Requirements
Family or Ethnoreligious Pressure
Curricular or career disappointment
Academic failure
Inability to adapt
Relationship (student - teacher) or (Student - administration) weak.
Bad career option
Lack of self-confidence
Lack of preparation for university levels (Skills, language level)
Political activity in the University
Lack of coincidences between the expectations of the students and the objectives of the career.
Other (Comment)

**41. I think that**
I will complete my university studies
I will change University

**42. In case of changing University, what would you choose?**
Private University in Catalonia
Another Public University in Catalonia
Another University in Spain
A University abroad
*Write the University if you have it in mind and specify why you would choose it.*

**43. Think of a moment where you have had doubts about your studies, what motivated you to stay?**
The content of the program
Your love for teaching/education
Previous postgraduate experiences
The benefits of a teacher job
Inability to be accepted in another career
Financial situation
Other (specify)

**44. What do you think the university can do to improve its attention to students who are in a situation of the vulnerability?**

**45. Do you know any type of programs offered by the faculty to help students? Select from the following listing.**
Remedial courses
Tutorados
Summer programs
Language courses
Counseling and mentoring
Support groups
Other (please comment)

**46. Do you know any classmate who has dropped out or thinks about dropping out? Why do you think he made or will make this decision?**

**47. Would you like to add something?**

**48. If you wish to receive the results of the study, please leave your email.**

**49. If you wish to collaborate in the future phases of this investigation, please leave your name and email and we will contact you.**

*Thank you very much for your cooperation!*

The sample consisted of 211 students from the 4 common programs of the faculties of Education in the two Catalan public universities; the UAB and the UB. 65.9% were students from the UAB, and 34.1% were students from the UB; out of the 13% were studying Childhood Education, 67.8% Primary Education, 13% Social Education, and 19.9% Pedagogy.

By combining data from different instruments, the researcher provides some credible information and avoids biases that can come from single methods (Bowen, 2009). Based on Bowen's claim, this study combines document analysis, interviews, and surveys to collect data hoping to reach reliable and unbiased outcomes.

### 3.2.2.5 Data Analysis

- **Document Analysis Procedure**

Based on the qualitative content analysis, the systematic procedure followed throughout this research to plan the examination of the document analysis.

**FIGURE 18.** *THE GENERAL PROCEDURAL MODEL OF QUALITATIVE CONTENT ANALYSIS FOLLOWED IN STUDYING DOCUMENT ANALYSIS BASED ON MAYRING (2014)*

| Document Analysis |
|---|
| Public information from the faculties of Education at UAB and UB |
| Written text |
| The documents intend to check the official numbers related to students' registration, dropout, and transfer out from the 4 programs of the faculties of Education |
| 1- Is there a relationship between the students' timetables and their need for a job? <br> 2- Which study program has the highest dropout rates? <br> 3- Are there any planned techniques to decrease dropout in the faculty? <br> 4- Do students usually dropout or transfer out? |
| Determination of techniques of analysis and establishment of a concrete procedural model |
| Code unit- Context unit |
| Reduction: Inductive Category Formation |
| Re-checking the category system by applying it to theory and material |
| Interpretation of the results in relation to the main problem and issue |
| Application of content-analytical quality criteria |

This study chooses inductive category formation as an analysis technique to summarize the data provided by document analysis. Such a technique aims to reduce the material provided and arrive at category formation from the content itself; according to Mayring (2014), such a technique eliminates the chance of biases.

This technique starts by reducing the material similarly to content analysis through starting by setting the themes of the categories based on the subject matter, research question, and objectives.

After doing so, the researcher studies the material line by line to submit or eliminate a category. At this point, if a category has been constructed, the researcher must provide a sentence description of the content of this category. As a further step, all passages have to be checked to decide whether they fit under the provided categories, or a new category needs to be created. Finally, if there are no more addition being made, the categories and the material must be rechecked for final confirmation. The whole system must be logical with an adequate level of abstraction; that is the categories presented must be of a fair number for presenting a coherent and clear picture of the material (Mayring, 2014).

Based on the previous explanation, the procedure of analyzing the document analysis in this study considers the following:

- **Research question:** the examination of the antecedents and prevention solutions of higher education dropout in the faculties of education at UB and UAB.

- **Units of analysis:**
  - **Coding unit:** semantic data presented in the material.
    - **Context unit:** the whole numeric and semantic information provided in the selected documents.

- **Category definition is formulated as** an overview of dropout, its antecedents, and rates in the faculty of education at UAB.

- **The level of abstraction is** variation in the number of new students and the trajectory of dropout.

- **Codes:**
1- Full, partial, variable timetables
2- New students matriculated
3- Number of 1$^{st}$-year droppers
4- Number of droppers registered in previous years
5- Dropout rates in the four programs
6- Transfer out vs. drop out

- **Main Categories:**
  - Job Status (1)
  - Program Satisfaction (2).
  - Institutional Support (3).
  - Data Collection (4-5).
  - Transfer out vs. Drop out (6).

- **Interview Data Analysis**

Interviews are transcribed, checked, and then approached through qualitative content analysis, most specifically content structuring/theme analysis which allows the mixture between inductive and deductive procedures to categorize, code, and analyze the content of the material.

According to Sutton and Austin (2015), the transcription of recorded material is an essential step before analysis, it allows the researcher to have the spoken words on paper as written material which facilitates his/her work. It is also recommended, in case one uses a professional transcriber, to sit with the person and involve them in the project. The transcription must be precise no matter what the outcome will be, lines must be numbered, spelling should be checked, speaker anonymous; pauses, laughers,

specific looks, punctuation, and any other contextual information must also be included (Sutton et al., 2015).

After transcribing the material, researchers must translate them from the "source" language to the "target" one without removing the content from its socio-cultural context (Regmi, Naidoo, & Pilkington, 2010). Regmi et al. (2010) refer to Clandinin and Connelly (2000) and Lapadat and Lindsay (1999) who mentioned the importance of decision-making during the translation process to obtain the right equivalent of one word in the source language with its meaning and interpretation to another in the target language. According to Cauce, Coronado, and Watson (1998) and Chang, Chau, and Holroyd (1999), equivalence in translation can either be a semantic one or a content one; the first refers to similar meanings after translation on both languages, and the second to the extent of an idea that holds similar meanings (as cited in Regmi et al., 2010).

Another useful term when translating transcriptions from a language to another is "transliteration" which involves replacing or complementing the word of the source language with another of the target one due to the lack of exact equivalence; one disadvantage of such a process is the loss of information; in such case, the exact translation is put in italics and the meaning and explanation in brackets or footnotes (Regmi et al., 2010).

In this study, the interviews were recorded in Spanish and were transcribed by a professional transcriber who had several meetings with the researcher to be more involved in the topic and get the necessary information regarding the contextual settings of each interview. After the transcriptions were done, the interviews were

translated from the source language (Spanish) to the target language (English) taken into consideration all the techniques and rules of translation.

Based on the description of qualitative content analysis in the previous section and following the procedural model by Mayring (2014), the following figure defines the material presented by the interviews.

FIGURE 19. *THE GENERAL PROCEDURAL MODEL OF QUALITATIVE CONTENT ANALYSIS FOLLOWED IN STUDYING INTERVIEWS BASED ON MAYRING (2014).*

Recorded Interviews

Interviews with the deans, vice deans and program coordinators in the faculties of Education at UAB and UB.

Tape-recorded material that were later transcribed and translated to the target language.

To analyze the antecedents of higher education dropout in the 4 programs of the faculties of education at UAB and UB from the interviewees' perspective and to examine the applied prevention

1- What is the experience of the interviewee with dropout?
2- What are the main antecedents of dropout?
3- How do the interviewees evaluate dropout in the faculty?
4- What are the prevention solutions used to prevent dropout?
5- What suggestions does the interviewee have in this matter?

Determination of techniques of analysis and establishment of a concrete procedural model

Coding unit (min.):   proposition
Context unit (max.):   all material from the interviews
Recording unit:   the respective cases

Mixed: Content Structuring/Theme Analysis

Re-checking the category system by applying it to theory and material

Interpretation of the results in relation to the main problem and issue

| Application of content-analytical quality criteria |
|---|

Based on Mayring (2015), the mixed technique starts with filtering the material and reducing it through implementing inductive, deductive, or both category formation procedures. In the case of this study, and since the interviews were based on the literature review, which means that the categories to be studied were defined previously to coding the text, the technique of analysis most adequate to studying the interviews is deductive category formation.

Mayring (2014) defined six steps for deductive content analysis:

1- Identifying the research question
2- Defining the category system
3- Defining the coding guideline
4- Material run-through
5- Revision of the categories and coding guidelines
6- Final working through the material
7- Analysis

Since the study uses the mixed method to analyze the interviews, the focus will be on the first six

steps from which we will introduce in this section the first three; the research question, the categories, and the coding guideline. It is worthy to mention that although the categories have been defined previously, academic considerations can lead to additional categories or restating of categories from preceding studies (Mayring, 2014).

- **Research question:** the examination of the antecedents and prevention solutions of higher education dropout in the faculties of education at UB and UAB.

  **Units of analysis:**
  **Coding unit (min.):** word
  **Context unit (max.):** all material from the interviews
  **Recording unit:** the respective cases

- **Definition of Categories:**
  - Understanding of dropout.
  - Motives of dropout.
  - Practiced prevention solutions.
  - Propositions to ameliorate.

- **Coding Guideline**

The survey questions were set based on the literature review. Each question targeted one of the reasons of dropout extracted from the literature in order to investigate it throughout the study.

Table 10 below links the survey question to the item that was analyzed. The full survey is found in appendix A.

**TABLE 10. *ITEM NAMES AND CODES***

| Item Name | Item Code | Questions Numbers |
|---|---|---|
| Program Satisfaction | Prog_sat | 14 |
| Atmosphere Satisfaction | Atmos_sat | 24 |
| Up to Date Satisfaction | Up_Date_sat | 17 |
| Content Satisfaction | Content_sat | 15 |
| Academic Performance | Perf2_AcaPerf | 31 |
| Motivation Efforts | Perf1_Motiv_effort | 32 |
| Mobility Support | Mobility_support | 26 |
| State Support | State_support | 25 |
| Logistic Support | Log_support | 23 |
| Personal Support | Pers_suport | 22 |
| Academic Support | Aca_Support | 21 |
| Administrative Support | Admin_sat | 16 |
| Department Communication | Depart_comm | 20 |
| Complaints Resolution | Comp_resolve | 19 |

| Extracurricular Motivation | Motiv_extraC | 34 |
|---|---|---|
| Tutor Performance | TutorPerf_sat | 30 |
| Professor Performance | ProfPerf_Sat | 18 |
| Know a dropper | Know_dropouts | 45 |
| Family Support | Fam_supp | 35 |
| Dropout Thoughts | Dropout_thoughts | 36 |
| Transfer out Thoughts | Transfer_out | 37 |
| Turnover Thoughts | Turnover | 40 |
| Readiness for Job Market | Preparation_for_Job | 27 |

Once the questions were coded, the codes were distributed in categories. The categories covered different topics that interest the study as the interviewees´ understanding of dropout, its reasons, the prevention strategies used and their suggestions for improvements to decrease dropout.

**TABLE 11.** *CATEGORIES, LABEL AND DEFINITIONS AND CODING RULES*

| Category label | Category definition | Coding rules | Codes |
|---|---|---|---|
| **Understanding of dropout** | The interviewee's understanding of the meaning of dropout and his/her experience with the phenomenon. | Everything related to: <br> -Definition of dropout. <br> -Related experience. <br> - Voluntary or Involuntary <br> - Dropout rates | Dropout_Mean <br> Dropout_History <br> Volun_Drop <br> Unvol_Drop |
| **Motives of dropout** | The interviewee's view towards the reasons for dropout. | - Examination of the reasons for dropout <br> -Analysis of the students' behavior <br> -Examination of the relationship between student/professor/administration. <br> -Complaints resolution process <br> -Faculty objectives and training, the orientation processes, personal support and department communication | Drop_Fac <br> Compl_resolve <br> **Institutional_Reas** <br> Orient_PreUni <br> Orient_Uni <br> Fact_Obj <br> Edu_Quality <br> **Prog_Satisfaction** <br> Prog_Sat <br> Atmos_Sat <br> Content_Sat <br> Preparation_for_Job <br> **Instructional_Support** <br> ProfPerf_Sat <br> TutorPerf_sat <br><br> **Financial_Situation** <br> Finan_situation |

| | | | Job_status |
|---|---|---|---|
| | | | **Performance** |
| | | | Perf_AcaPerf |
| | | | Perf_Motiv_effort |
| | | | Motiv_extrac |
| **Practiced prevention solutions** | The interviewee's evaluation of the prevention solutions used. | - Data accessibility.<br>- Methods put in practice to decrease dropout.<br>- Effectivity of the methods.<br>- State and faculty policies | Data_Coll<br>**Institutional_Supp**<br>Pers_support<br>Aca_support<br>Adm_sat<br>Depart_comm<br>Comp_resolve<br>Fac_Training<br>Supp_Act<br>Student_Involvement<br>Prog_amelioration<br>**Financial_Supp**<br>Mobility_support<br>State_support<br>Log_support |
| **Propositions to ameliorate** | The interviewee's visions, expectations, and future demands. | - Recommendations.<br>- Demands.<br>- Solutions presented. | Recommendations<br>Demands<br>Solutions |

After finishing the first step of theme analysis, the second step is extracting all the coded material of each category and summarizing them per category; the aim of theme analysis is "to identify themes as categories and to analyze frequencies and contingencies of the content categories" (Mayring, 2014). Mayring (2014) suggests forming new categories through inductive category formation if needed in case the codes are too many. The importance of a theme is being able to draw conclusions based on themes through presenting data as related codes, interviewees' quotations, and researcher's interpretations (Sutton et al., 2015).

- **Survey Analysis**

Quantitative data analysis is used throughout this study to analyze the surveys by viewing the relationship between variables and testing scientifically the hypotheses. It is worthy to mention that some parts of the surveys that included open-ended questions and comments will be analyzed through Qualitative Content Analysis.

In the current study, the correlations analyzed will be between independent variables (X) or predictors: Program Satisfaction, Performance, Financial Support, Institutional Support, and Instructional Support; and the dependent variables (Y), or outcome being Thoughts of Dropout. Positive relations between variables occur when there are higher values of X that result in higher values of Y. Negative relations occur when the higher values of X result in lower values of Y.

Throughout the multiple regression, we will use more than one of the previously mentioned independent variable to assess the dependent variable Thoughts of Dropout. In the multiple regression analysis, the coefficient becomes more reliable when the degree of correlations decreases between the independent variables.

# FINDINGS

Based on the mixed method, this chapter analyzes the data collected in different Data Analysis Procedures (DAP) depending on the content of the tool used.

The chapter projects and analyses the findings of the data collected by each of the three instruments: document analysis, interviews, and surveys.

The analysis made in this chapter intends to show the frequency of dropout in the different programs of the faculty of education, to enumerate the most important reasons for dropout from the administration and students´ perspectives, to study the efficiency of communication between faculty members, and to evaluate the prevention solutions used.

## 4.1 Document Analysis

The documents we have received from the faculty of Education of UAB, allow us to observe the longitudinal development of two main features, the financial situation of the students and the dropout rates.

In the four programs of the faculty, the students have the freedom to choose between the full-time, part-time, and variable time schedules. Depending on their choices, we would be able to analyze their financial situation and its effects on their studies. Logically, the fuller their schedule is, the less is the chance for them to be working at the same time, and the less is the chance for them to drop out due to adult responsibilities or financial situations.

Figure 20 shows the timetables chosen by the accumulated number of students registering in Childhood Education between the years 2009-2010 and 2017-2018. The number of students registering full-time has increased throughout the years from 108

in 2009-2010 to 380 in 2014-2015 to reach 512 in 2017-2018. The number of part-time students is very small and has reached a maximum "8" in years 2013-2014, as for the students who chose variable timetables, the number varies throughout the years; however, it has been decreasing continuously from 247 years 2012-2013 to 31 years 2017-2018. These numbers could predict some improvements in the financial situation of the students between the years 2009-2010 and 2017-2018; the students' ability to take daily full-time courses suggests that they are not working to afford the cost of living which allows them to focus on their studies. However, the students who registered in part-time or variable timetables probably have a part or full-time job after or before their lessons. These students usually work whenever they have the chance to support themselves or people relying on them financially.

**FIGURE 20.** *THE ACCUMULATED NUMBER OF STUDENTS MATRICULATED BETWEEN THE YEARS 2009-2010 AND 2017-2018 IN CHILDHOOD EDUCATION DEPENDING ON THEIR TIMETABLES.*
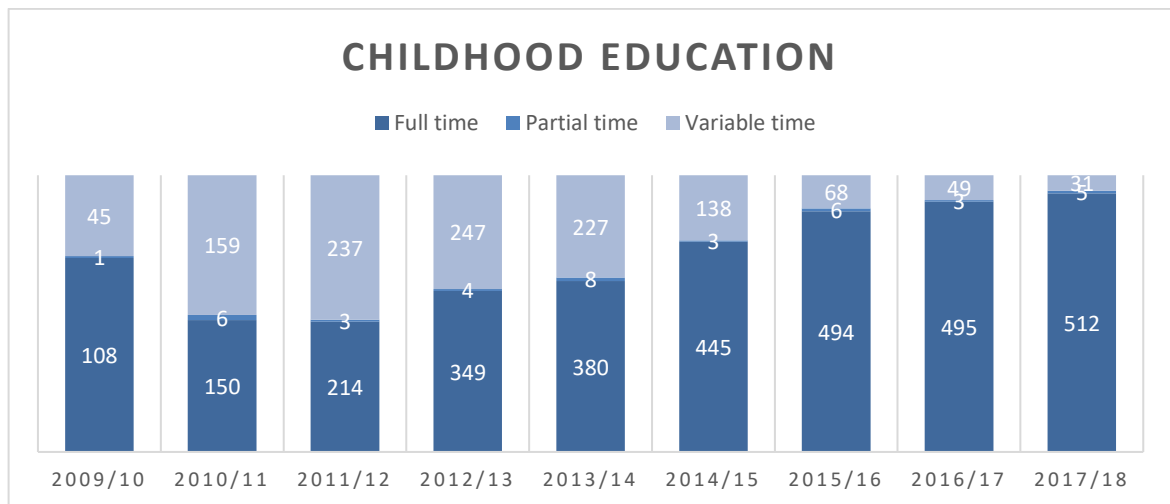


Similar to figure 20, figure 21 projects the timetables of the students matriculated in Primary Education between the years 2009-2010 and 2017-2018. The number of

students registering in full-time courses has always been bigger than the number of students registering in part-time or variable times. The peak of this number is in the years 2013-2014 in which 1034 students were registering for a full-time schedule, this number is still considered noticeable during the academic year, 2017-2018, in which there are 990 students. Regarding the part-time students, they vary between a minimum of 3 and a maximum of 8. As for those who registered for variable schedules, as in the case of Childhood Education, the number has been decreasing, it moved from 380 in years 2013-2014 to reach only 56 students; which implies that fewer students need flexibility in their timetables, so fewer students are working and studying at the same time.

FIGURE 21. *THE ACCUMULATED NUMBER OF STUDENTS MATRICULATED BETWEEN THE YEARS 2009-2010 AND 2017-2018 IN CHILDHOOD EDUCATION DEPENDING ON THEIR TIMETABLES.*
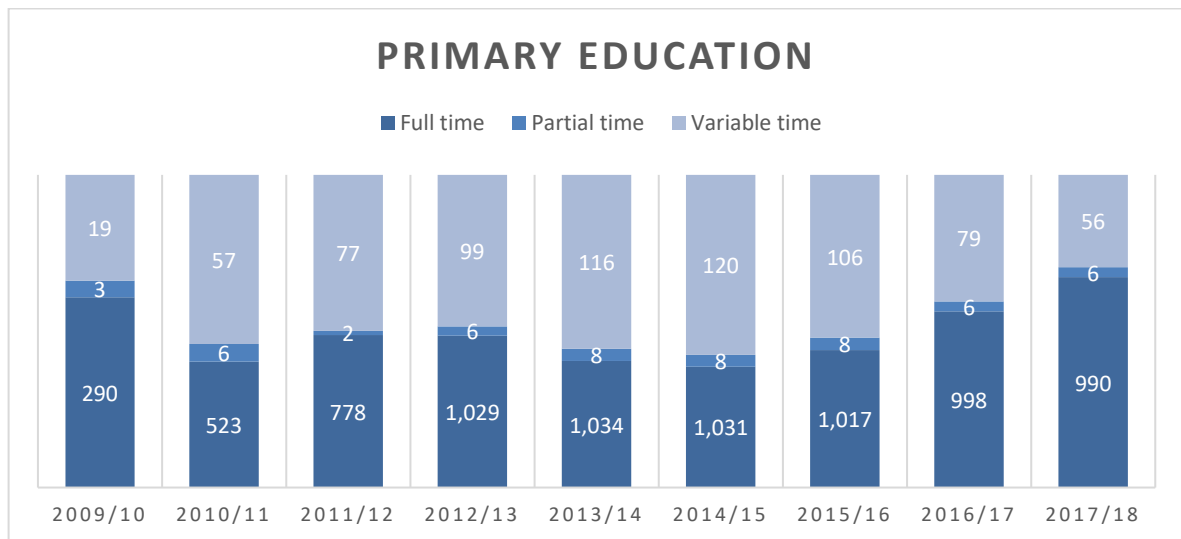


The changes in the program of Social Education are very similar to the previous programs. The number of full-time students in 2017-2018 was 297, the maximum number reached for part-time students was 5 during academic years 2014-2015 and

2015-2016, and the number of students registering for variable timetables has also been decreasing from 111 in years 2013-2014 to 41 2017-2018.

**FIGURE 22.** *THE ACCUMULATED NUMBER OF STUDENTS MATRICULATED BETWEEN THE YEARS 2009-2010 AND 2017-2018 IN SOCIAL EDUCATION DEPENDING ON THEIR TIMETABLES.*
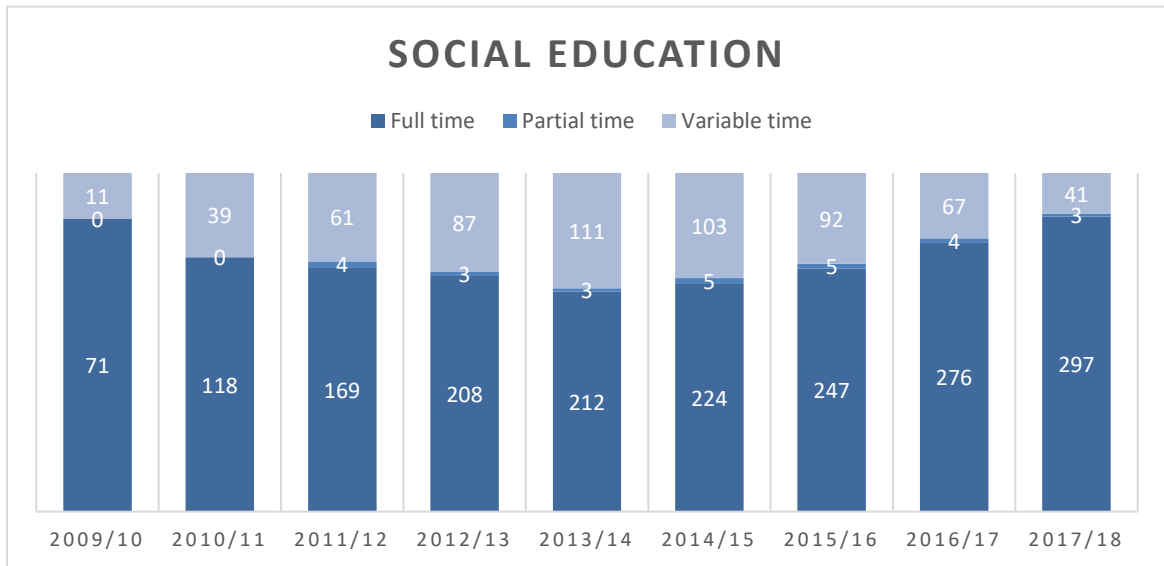


Regarding Pedagogy, the numbers of the three schedules have been noticeably varying throughout the years, and there is no stable change among them. Nevertheless, the highest number of students has always been found in full-time studies, it varied between 71 in the years 2009-2010 and 265 in the years 2013-2014. As for part-time students, the numbers are the highest among the 4 programs, they have reached 11 in years 2016-2017 and 8 in the years 2017-2018. As for students registering in variable timetables, their number has been varying between 27, years 2013-2014 and 30, years 2016-2017, to reach nowadays 24 which is the lowest number since 2013-2014.
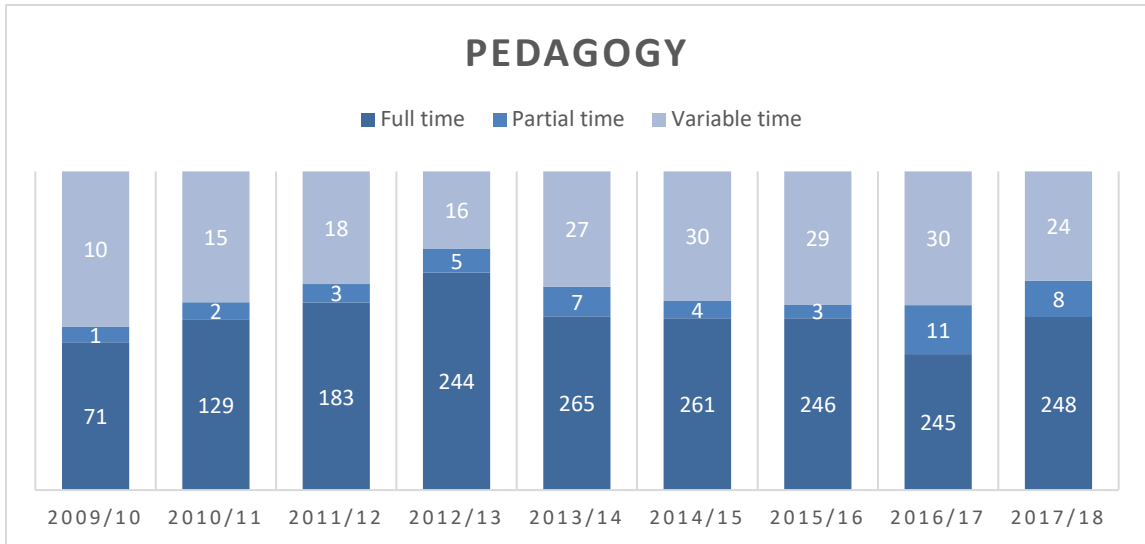
Analyzing graphs 20 to 23, several points should be taken into consideration:

1. The total accumulated number of students registering in the four programs (Childhood Education, Primary Education, Social Education, and Pedagogy) between years 2010-2011 and 2017-2018 has been continuously increasing which proves that the faculty of Education in UAB has made a good reputation around Spain and is continuously receiving new students. The numbers of students who matriculated in the academic year 2010-2011 were 315, 586, 157, and 146 consecutively in the four programs, these numbers have increased to reach 548, 1052, 341, and 280 successively in the same programs for years 2017-2018 which is a notice of overall good faculty performance.

2. The decrease in the number of students registering in variable timetables from the academic year 2013-2014 till the year 2017-2018 implies that the financial situation of the students has been ameliorating continuously since these years till today, noting that before that period, the number was mostly increasing suggesting that more students had to work. Due to this, we can suppose that the years 2013-2014 might have

been the twisting point towards better financial situations among the Spanish families after the economic crisis of the year 2008.

3.  The fact that the number of students registering in full-time schedules is higher than the numbers of students registering in part or variable time schedules, should not provide educators with comfort because in education every student matters. The implication that fewer students need to work based on their chosen timetables, does not mean that we should disregard those who might be working and who can be more subject to dropout. Focusing on the academic year 2017-2018, and based on the graphs, by adding the number of students registering in part-time and variable schedules, we have simultaneously in the 4 programs, 36,62,44, and 32 that is 174 students who might be subject to drop out due to their financial situations or adult responsibilities. That is 174 probable dropout cases out of 2296 students, which consists of 2221 students who are registered in the 4 programs, in addition to the 75 full-time schedule students who are mixing two of these academic programs. This leads to a percentage of 7.58 % of students who might be subject to drop out due to a lack of financial support.

    Furthermore, based on table 5 of chapter 8, the number of new students registering between academic years 2009-2010 and 2017-2018. Noting that the places offered are limited and do not exceed 600 per year no matter how many requests there are, the graph shows that there is a kind of consistency in the number of new students registering yearly which implies a kind of stability in the management of the programs.
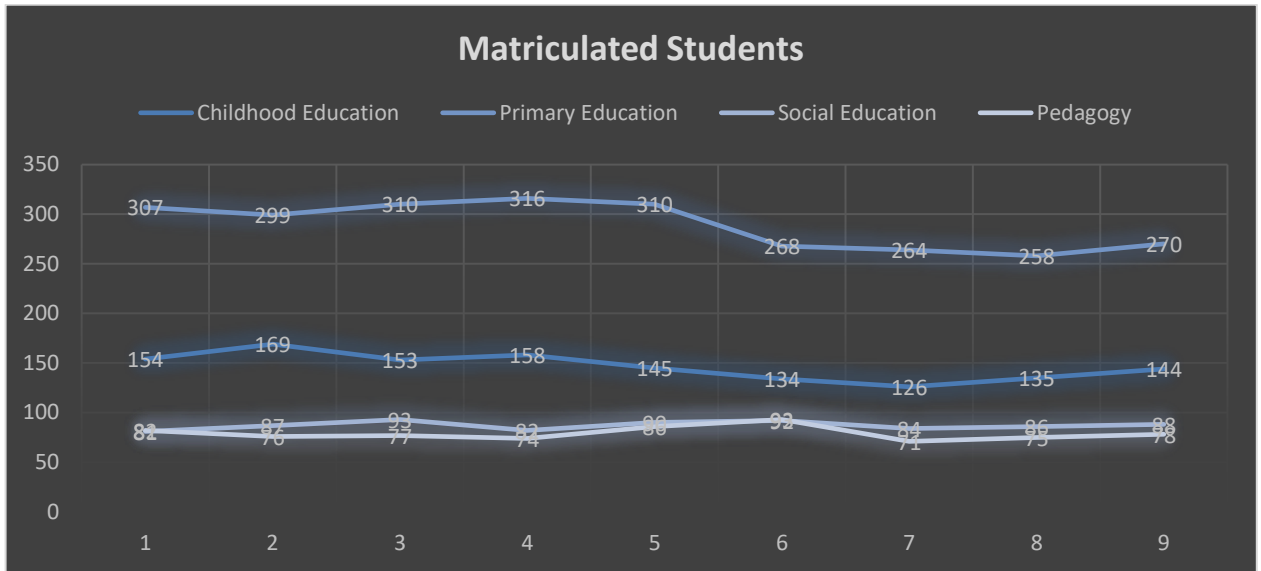
As mentioned previously, the document provided by the UAB also projects the dropout rates in the different programs of the faculty of Education between the years 2010-2011 till 2015-2016.

Table 12 shows the general number of students registering in the faculty of education at UAB between years 2010-2011 and 2015-2016, the new students matriculated at the beginning of the same academic years, the number of new-comers dropping out, and the general number of students dropping out from each study program. The target of this table is to observe the development of dropout rates throughout the years, to prove that most students usually drop out during the first year, and to compare the dropouts among the study programs. Based on the numbers provided by the document and the percentages calculated in this study, most students drop out during or after their first year which is usually due to a weak orientation on the high school level or a lack of guidance at the university level. As for students who dropped out after, the table shows that their numbers have either decreased or varied in the four programs to reach in

2015-2016 "0". However, this number does not mean that we can prevent students from dropping out in the coming years especially that the reasons for dropout at this point are several and need special attention and solutions depending on each situation.

**TABLE 12.** *THE NUMBER OF STUDENTS DROPPING OUT BETWEEN YEARS 2010-2011 AND 2015-2016 IN THE FOUR STUDY PROGRAMS OF UAB.*

| | Childhood Education | | | | | | |
|---|---|---|---|---|---|---|---|
| Academic Year | General number of students | Number of new students | Number of 1st year droppers | Number of droppers registered in previous years | General number of droppers | Percentage of 1st year droppers out of the general number of droppers | Percentage of dropout rate per year out of the general number of students |
| 2010-2011 | 315 | 169 | 7 | 10 | 17 | 41.17% | 5.4% |
| 2011-2012 | 454 | 153 | 2 | 3 | 5 | 40% | 1.10% |
| 2012-2013 | 600 | 158 | 5 | 5 | 10 | 50% | 1.67% |
| 2013-2014 | 615 | 145 | 11 | 3 | 14 | 78.57% | 2.28% |
| 2014-2015 | 586 | 134 | 8 | 3 | 11 | 72.72% | 1.88% |
| 2015-2016 | 568 | 126 | 4 | 0 | 4 | 100% | 0.70% |
| | Primary Education | | | | | | |
| Academic Year | General number of students | Number of new students | Number of 1st year droppers | Number of droppers registered in previous years | General number of droppers | Percentage of 1st year droppers out of the general number of droppers | Percentage of dropout rate per year out of the general number of students |
| 2010-2011 | 586 | 299 | 35 | 27 | 62 | 56.45% | 10.58% |
| 2011-2012 | 857 | 310 | 21 | 15 | 36 | 58.33% | 4.2% |
| 2012-2013 | 1134 | 316 | 22 | 20 | 42 | 52.38% | 3.70% |
| 2013-2014 | 1158 | 310 | 23 | 14 | 37 | 62.16% | 3.19% |
| 2014-2015 | 1159 | 268 | 17 | 9 | 26 | 65.38% | 2.24% |
| 2015-2016 | 1131 | 264 | 18 | 0 | 18 | 100% | 1.6% |
| | Social Education | | | | | | |
| Academic Year | General number of students | Number of new students | Number of 1st year droppers | Number of droppers registered in previous years | General number of droppers | Percentage of 1st year droppers out of the general number of droppers | Percentage of dropout rate per year out of the general number of students |
| 2010-2011 | 157 | 87 | 13 | 7 | 20 | 65% | 12.7% |
| 2011-2012 | 234 | 93 | 17 | 6 | 23 | 73.91% | 9.82% |
| 2012-2013 | 298 | 82 | 5 | 7 | 12 | 41.66% | 4.02% |
| 2013-2014 | 326 | 90 | 6 | 6 | 12 | 50% | 3.68% |
| 2014-2015 | 332 | 92 | 6 | 2 | 8 | 75% | 2.4% |
| 2015-2016 | 344 | 84 | 9 | 0 | 9 | 100% | 2.61% |

| Pedagogy | | | | | | | |
|---|---|---|---|---|---|---|---|
| Academic Year | General number of students | Number of new students | Number of 1st-year droppers | Number of droppers registered in previous years | General number of droppers | Percentage of 1st-year droppers out of the general number of droppers | Percentage of dropout rate per year out of the general number of students |
| 2010-2011 | 146 | 76 | 12 | 9 | 21 | 57.14% | 14.38% |
| 2011-2012 | 204 | 77 | 10 | 4 | 14 | 71.42% | 6.86% |
| 2012-2013 | 265 | 74 | 12 | 10 | 22 | 54.54% | 8.3% |
| 2013-2014 | 299 | 86 | 17 | 11 | 28 | 60.71% | 9.36% |
| 2014-2015 | 295 | 93 | 20 | 4 | 24 | 83.33% | 8.13% |
| 2015-2016 | 278 | 71 | 14 | 0 | 14 | 100% | 5.03% |

Based on table 12, the following graph shows the trajectories of the dropout rates in the four study programs between the years 2010-2011 and 2015-2016. First comes Pedagogy with the highest dropout rate among the four programs whether in 2010-2011 (14.38%) and 2015-2016 (5.03%), then Social Education with 12.7% in 2010-2011 and 2.61% in 2015-2016, after these two there are Primary Education and Childhood Education with respectively 10.58% and 5.40% in 2010-2011 and 1.60%, 0.70% in 2015-2016. The dropout rates evolution shows a decrease in the number of students dropping out from the four study programs which indicate that the faculty might have been taking some measures to deal with dropout rates. However, figure 25 shows that Primary Education is the only study program in which the dropout rate kept on decreasing constantly between years 2010-2011 and 2015-2016; all three other programs show inconsistency in the trajectory of dropout rates. As shown in graph 25, in Pedagogy, the dropout rate has increased from 6.86% in 2011-2012 to 8.30% in 2012-2013 to reach 9.36% in 2013-2014 and then to start decreasing again. In Childhood Education, the dropout rate has reached 1.10% in 2011-2012 and then increased to 1.67% in 2012-2013 to reach 2.28% in 2013-2014 and then to decrease again. As for Social Education, the dropout has decreased constantly till the academic

year 2014-2015 to reach 2.24% and then increased slightly to reach 2.61% in 2015-2016. Out of these observations, the study implies that in Primary Education, the topic of the dropout might have been considered and some effective strategies or some program updates were implemented to help the students and meet their expectations to prevent them from dropping out. Similarly and due to the minor inconsistency in the dropout rate of Social Education, the study suggests that the topic of dropout has been given some attention which nevertheless needs to be improved to prevent a continuous upsurge. On the opposite, in both Pedagogy and Childhood Education, the inconsistency in dropout rates shows that there is no serious process that allows to observe, evaluate and think of some solutions with long-term results to decrease dropout rates.

**FIGURE 25.** *DROPOUT RATES EVOLUTION IN THE FOUR PROGRAMS BETWEEN YEARS 2010-2011 AND 2015-2016*
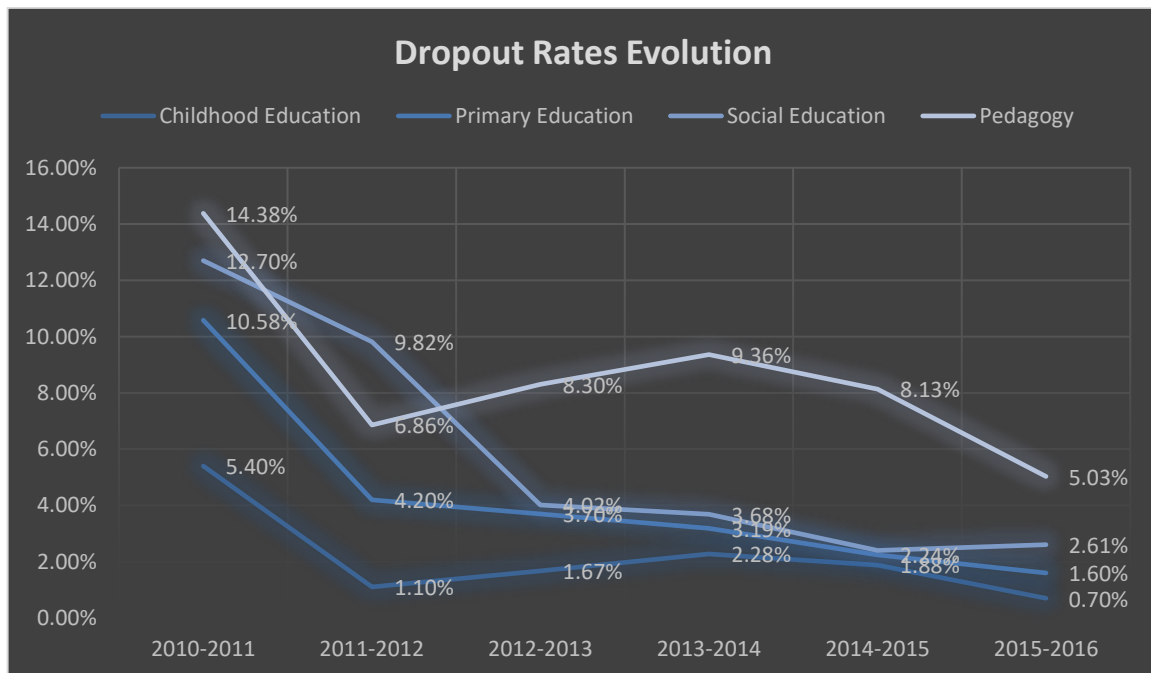
In addition to the number of students who dropped out yearly, table 7 in the previous chapter distributes the number of droppers in two; those who dropped out from the major and transferred out to another one, and those who dropped out from the major and left the university. Figure 26 shows the general number of students who dropped out between the years 2010-2011 and 2015-2016 by adding the numbers provided in table 7 and distributing them in the two previously mentioned categories. Figure 26 reveals that most students who dropped out from each of the four programs left the university and quit their studies keeping in mind that maybe some of them have transferred to another university in Spain or abroad. Looking deeper into the 4 study programs, the percentages of the students who transferred out to another major out of the general number of droppers is respectively 9.83%, 13.57%, 11.9%, and 19.51% in the four study programs which reveal that these students especially those who chose Pedagogy which has the highest percentage out of the four, were either wrongly oriented, weakly assisted, or deceived by their study programs so they preferred switching majors.

**FIGURE 26.** *THE DISTRIBUTION OF THE GENERAL NUMBER OF DROPPERS BETWEEN THOSE WHO TRANSFERRED OUT AND THOSE WHO DROPPED OUT BETWEEN ACADEMIC YEARS 2010-2011 AND 2015-2016 IN THE FOUR STUDY PROGRAMS.*
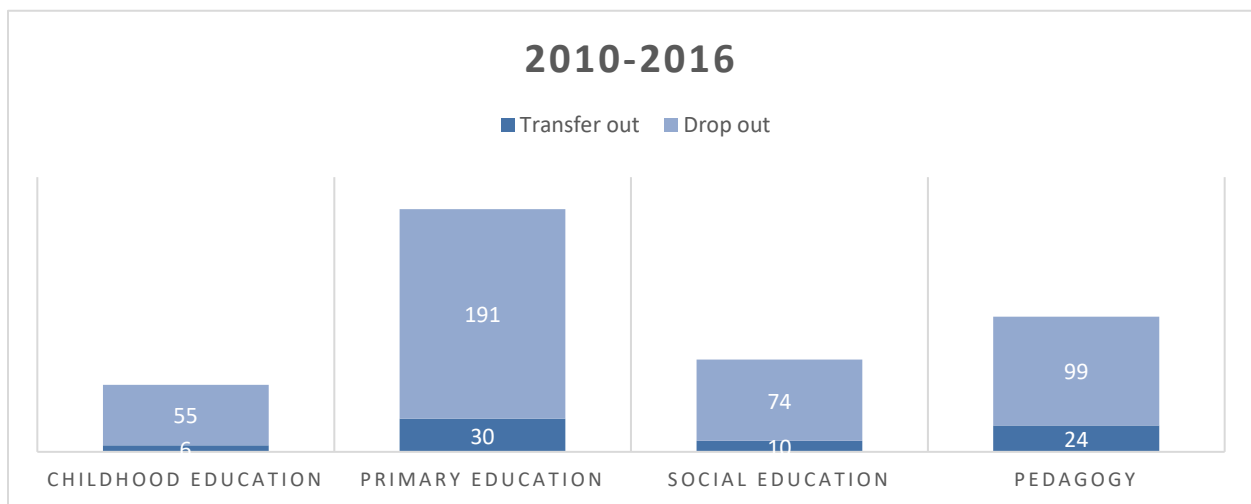
Based on figure 26, figure 27 shows the general percentages of students who transferred out and those who dropped out in all the study programs. Out of 489 droppers between academic years 2010-2011 and 2015-2016, 70 dropped out from the major and transferred out to another one, and 419 dropped out from the university. The percentages projected in graph 27 demonstrate that the number of students who quit their university studies is alarming and requires a deep study of reasons which can either be personal, institutional, economic, or academic; without analyzing the reasons, similar cases cannot be supported or helped to persevere their studies or even transfer out to a major that suits them better.

**FIGURE 27.** *THE GENERAL PERCENTAGE OF STUDENTS WHO TRANSFERRED OUT AND THOSE WHO DROPPED OUT BETWEEN ACADEMIC YEARS 2010-2011 AND 2015-2016.*
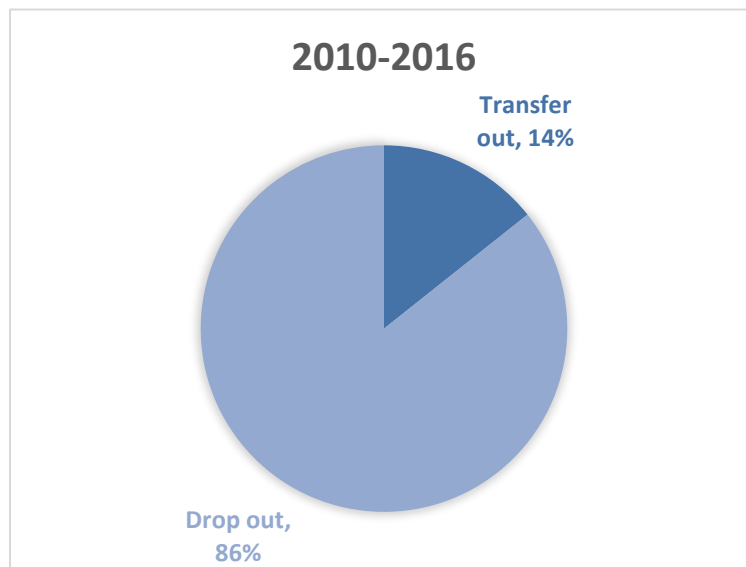


In sum, based on tables 6 and 7, table 13 shows the general number of students in the faculty of education and the general number of students who dropped out yearly between academic years 2010-2011 and 2015-2016 to allow an overall observation of the dropout rate in altogether the 4 programs of the faculty of education. Although

there was a slight increase between 2012-2013 and 2013-2014, the general percentage

of dropout rate has been decreasing throughout the years which affirms again the

effective overall performance of the management team at the faculty of education of

UAB.

TABLE 13. *AN OVERALL OVERVIEW OF DROPOUT NUMBERS IN THE FACULTY OF EDUCATION BETWEEN 2010-2011 AND 2015-2016*

| Academic year | The general number of students | The general number of droppers in the 4 programs | Percentage |
|---|---|---|---|
| 2010-2011 | 1204 | 120 | 9.96% |
| 2011-2012 | 1749 | 78 | 4.46% |
| 2012-2013 | 2297 | 86 | 3.74% |
| 2013-2014 | 2398 | 91 | 3.79% |
| 2014-2015 | 2372 | 69 | 2.90% |
| 2015-2016 | 2321 | 45 | 1.93% |

## 4.2 Interviews

Analyzing the part of the interviews, which tackles the interviewees' understanding and experience with dropout, we have classified the answers to the common questions in the following categories: understanding of dropout, and experience with dropout.

### 4.2.1 Understanding of Dropout

#### 4.2.1.1 Dropout Definition

The table below projects the different definitions of dropout as stated by some of the interviewees to allow the readers to have a better understanding of the meaning of dropout in the perspective of each interviewee.

**TABLE 15.** *DROPOUT DEFINITION BASED ON SOME INTERVIEWEES' ANSWERS.*

| |
|---|
| *"The dropout is abandonment, isn't it? Well, I understand by abandonment students who have left, have abandoned the career they did. And they have abandoned it because they have gone to another career or because they have left the university. Transfer out or Dropout."(D2)* |
| *"I associate it with the abandonment of studies. People who enroll in first and do not end up being graduates." (VDA2)* |
| *"Well, I understand the abandonment as those students who do not finish their studies for different reasons." (VDP2)* |
| *"I associate it with the abandonment of university studies, not of the university. Abandonment of university studies, a change of faculty, abandonment, etc." (VDQI2)* |
| *"Well with the abandonment of studies. Boys and girls who drop out before finishing." (VDSM2)* |
| *"The dropout I understand that is the abandonment of studies, which refers to students who for one reason or another stop ... abandon their studies." (CPE2)* |
| *"For me, I associate it ... I understand abandonment. But I suppose that unless I read your proposal or petition, I associated it with the absolute abandonment of the University. Ok, not to change because at the first I do not like so much Pedagogy and maybe later I try Primary Education. The impossibility to continue. In no aspect, in any race, in any degree." (CP1)* |

In the definitions of the interviewees, the use of the word "abandonment" was redundant. Most answers related dropout to the general abandonment of studies, and

some have even gone a step forward and related it to reasons. In general, all interviewees had a clear overview of what is meant by the concept of "dropout."

Regarding the interviewees' experience with higher education dropout, 2 out of 10 only have either read, researched, followed up with students who transferred out or wrote about the topic; and 1 had an experience with "early school leaving". The lack of knowledge or even interest in the topic demonstrates that the phenomenon of dropout has not been taken into account in the previous years which implies that students' decision to drop out was rarely followed up or investigated.

According to the interviewees, the frequency of dropout in the faculties of Education is a minor issue. The faculty of education at UAB has fewer dropouts than other faculties for two main reasons, "the vocation" students usually feel for education as a career, and "the demanding entry-level" (D2). Similarly, according to the team of the faculty of Education at the UB, dropout should be set on an "intermediate point" for it is neither casual nor non-existing; there is no noticeable abandonment rate since there are "continuous assessments" and "paternalism" when dealing with students (D1).

Going deeper to observe the answers of the interviews, the coming paragraphs discuss the specific topics tackled with each interviewee or a group of them.

## 4.2.1.2 Regional Characteristics

On the subject of Spanish and Catalan students' points of view regarding their studies, it was considered positive as "studying at the university is a natural process" which students hope to accomplish, especially that it prepares them to "have access to the field of work" (VDA 1, VDA2). The faculties of Education in Catalan public universities follow the standards of the "European and Catalan accreditation systems.

They are very established as they are public information, tutorial action systems with students, fair evaluation systems, alternative training systems, etc. Monitoring, quality systems ..." (VDQI2). Therefore, evaluating the regional characteristics of higher education studies based on the interviewees´ replies implies that this step is seeing as important for Catalan students and their parents and that students are motivated to go for university studies.

### 4.2.1.3 Voluntary and Involuntary Dropout

Through analyzing the common questions between deans and vice deans, we have found that interviewees have different responses when classifying dropout between voluntary and involuntary.

*" I believe that in general, they leave involuntarily. Because the abandonment does not cease to be a certain personal failure. I want to do something and I have not succeeded. Therefore, I believe that it is more involuntary than voluntary" (D2)*

*" The main cause would be involuntary, economic." (D1)*

*"In general, in this faculty students leave the faculty voluntarily, first because there is a very small drop-out rate. I suppose you should have seen the statistics that are public. Currently, the statistics are public and the dropout rate is very small. Therefore who leaves the faculty is because he considers that the studies are not appropriate to what he had thought, or because he considers that it is not the profession he wants to develop, or there is a very small part in which the faculty sees that person will not be a good teacher, for example, here there is a fairly uncompromising attitude…" (VDQI2)*

Among the interviewees, some also thought that dropout could be both voluntary and involuntary depending on the reason.

*"In general, I believe that there are two typologies. There are people who, due to unforeseen external causes, leave. With which, what I told you sometimes, family problems that were not planned. And these are involuntary. And others are voluntary because it makes an analysis or the teacher has made him reflect and see that this career may not be the right career. With this, or sometimes without the reflection of the teachers, he himself comes to the conclusion that it is not what he wants. I think it is not, that there is more voluntary than involuntary but I do not have data to affirm anything." (VDP2)*

*"Voluntarily or involuntarily ... depends on how you define yourself voluntarily, that is, you always make the decision, but maybe you make the decision because you can not pay for the studies. Well, I do not know ... it depends on how they are read."(VDEM2)*

Based on the replies, the study detects a lack of awareness among the interviewees regarding the categorization of the different reasons of dropout and how each affect on the students´ decision during the academic journey.

## 4.2.1.4 Highest Dropout Rate

On questions tackling dropout rates among majors and transfer between programs, most interviewees mentioned that usually students from the 1st and 2nd year tend to drop out (CP1, CP2) and most of them are doing pedagogy.

Pedagogy has the "highest percentage" of dropout especially that for most students, this major was never their first choice, it was mostly their "second option" and they were obliged to carry on with it for their "selectividad" exams limited their choices

*"I could not enter Primary Education because suddenly I suspended the culture test which is complimentary access to the University" (Student reply)*

Following pedagogy, comes social education due to the "broad spectrum" of the majors, unclear "students' expectations", and low entrance grades.

*"I imagine that it will be greater abandonment in Pedagogy and Social Education." (D2)*

*"The lowest are the two degrees of teaching. Infant and Primary it's pre-service teaching. It's to teach in the Primary School. These are the ones that have the lowest abandonment rate ... instead Pedagogy and Social Education have more dropout rates, more I believe Social Education, more than Pedagogy. Social Education is more irregular ... They register, they take a course, they disappear, they return ... it is the one that is more unstable."(VDA2)*

*"I have no idea. I have no idea of the abandonment rate. These data do not reach me. Well, I would not know how to say because we also have to speak in percentage rather than absolute numbers because of course there are many students in primary school but I think that teaching careers are relatively little neglected. I know less about Social Education and Pedagogy because I do not teach in these degrees, and it is possible that in some of these there is a little more abandonment. But I have no idea. I can not speak if I do not have data." (VDP2)*

As for primary education, according to its coordinator at UAB, it is a "quite welcome" degree and usually, students transfer from other majors to this one.

Most replies of the interviewees indicated a lack of communication between faculty members is the comparison of the dropout rates between the four programs; several answers from UAB started with "I don't know", "I have no idea", or there is a "lack of data". As for the UB, no comparison was made and the answer received was very broad, "It depends on each year. There is no problem with one program more than the other" (VDA1)

Based on the replies, the study assumes that there is no serious discussion on dropout in the faculties of education at both UB and UAB and that there is no procedure of dealing with specific cases or communicating them among faculty members.

### 4.2.1.5 Department Authority

As to the authority the coordinators have upon the students' behavior, according to the interviewees, it is very "minimal" as they can only contribute to improving "the syllabus" which can affect the "students' performance" not behavior, or they can assist "student service" center as is the case in the UB, where the coordinator can orient "fragile" students to the center to get some "positive" assistance.

Similar to the coordinators, the deans do not have the power or right to dismiss anybody from public universities even if they are subject to "mental problems"; the students usually receive four and more calls which might lead to self-dismissal.

This entails that the team has limited control and authority over the quality of the students in the public universtities which might lead to having students who do not fit in the career, or those who disturb the flow of the class which might affect the atmosphere and lead other students to dropout.

To summarize, observing the 2nd part of the interviews, which tackles the interviewees' understanding and experience with dropout, we could induct the following main points:

- There is an acceptable understanding of dropout as a concept.

- There is a weak experience with dropout as a phenomenon at university level.

- There is no noticeable dropout cases at the faculties of education in both UB and UAB.

- Students are well-aware of the importance of their university studies.

- Quality standards are set by the state and untouched by the university and faculty.

- Dropout is not considered as a quality criteria.

- Students' preference is to study in their local universities.

- Internships assignment process is well-organized and mostly satisfying.

- Pedagogy has the highest transfer rate due to several reasons.

- Coordinators' roles do not include the authority to dismiss students based on behavior.

In the following section, we will discuss the topics discussed throughout the 3rd part of the interviews:

7 out of 10 interviewees had clear and direct definitions for the concept of dropout, some of them spoke of dropout as an absolute abandonment of studies, and some others mentioned transfer out which means dropping out from a certain major to start another. Although the study is mainly concerned with students who drop out of their majors and leave the university, transfer out is also a topic of interest that will be examined in future studies.

## 4.2.2 Motives of Dropout

### 4.2.2.1 Dropout Factors

Throughout the 3rd part of the interview which focuses on the antecedents of dropout, there was a common question projecting several reasons that lead to dropout built on the literature review hoping that the interviewees would give their opinion regarding each. Several interviewees consider that it is usually a combination of many factors.

*"I suspect from some cases that I know there are different causes, right? On the one hand, some people leave it for an economic issue. Some people leave it because they understand that it is not their vocation or that they do not want to dedicate themselves to that profession." (VDP2)*

*"Let's see, I think there are usually several things. There is never a single cause but there are usually several things." (D2)*

Table 15 summarizes the responses of the interviews through placing the reasons of dropout in order depending on the number of interviewees´ ranking. As noticed, three main reasons were mostly agreed on; financial situation, the mismatch between expectations and content, and poor orientation. Nonetheless, two out of ten interviewees did not give any specific or concrete answer regarding the reasons, denoting the lack of studies on the topic and the drawbacks in following up students throughout the years.

*"I would not know how to give a concrete answer, because I do not know which of these causes can be. In addition, I believe that two types of factors intervene. On the one hand, because we lack, that is, we do not have these follow-up systems, we do not call the students "hello, how are you, why did not you come to class today?" And on*

*the other hand, because the students themselves do not have the habit or the culture to tell us what was happening to them." (CPE2)*

*" I do not have any research done about it. Therefore, when they ask to leave, they ask us to return the registration, the payment. The reasons they claim are usually because they have found a job and can not say no to work and it is incompatible with their schedule or because they can not keep up and need to go to work, or for health reasons. I do not know, usually not ..." (VDA2)*

TABLE 16. *REASONS FOR DROPOUT BASED ON THE INTERVIEWS.*

| Reason | Ranked by | Sample answers |
| --- | --- | --- |
| **Financial situation** | 6 | *"The most important thing is basically this: financial dependence or independence of students, which is also linked to families." (D2)*<br>*"Complexity to combine studies with work. And that can be an important factor, the economic issue. Recall also that we are in Catalonia, tuition fees are the highest in the entire Spanish State." (D1)*<br>*"Economic issue." (VDA1)*<br>*"This clearly we have a group of students ... a higher percentage than in other faculties of the university have economic difficulties or need scholarships or grants to continue studies. Usually, they either work or look for systems to continue, but in some cases they clearly cannot." (VDP2)*<br>*"Socioeconomic difficulty."(CP1)*<br>*"For economic reasons. Some students say they cannot pay." (VDSM2)* |
| **The mismatch between expectations and content** | 5 | *"I had some expectations that have not been met, I thought that here I would be all day with children and it turns out that I am not with children ..." (D2)*<br>*"There are some expectations from the students that when they reach the faculty they cannot find them." (D1)*<br>*"Do not cover the expectations that they believed because maybe there is more workload, it was not exactly what they thought."(VDA1)*<br>*"Do not feel that the career meet their expectations, or did not imagine that and realize that perhaps it is not theirs and decide to change." (VDSM2)* |

| | | |
|---|---|---|
| **Poor orientation** | 2 | *" I associate it that sometimes there is a poor orientation. The student knows that he wants to study but he is not clear about which driver, and then sometimes he starts and automatically realizes that he is not going. 2, I also associate it sometimes with the type of studies he is doing that does not have the orientation he expected, a more applied orientation or not." (D1)* |
| **No specific answer** | 2 | *"I do not have any research done about it …* <br> *The reasons they claim are usually because they have found a job and can not say no to work and it is incompatible with their schedule or because they can not keep up and need to go to work, or for health reasons." (VA2)* <br> *"I think there is a bit of everything … I would not know how to give a concrete answer, because I do not know which of these causes can be. In addition, I believe that two types of factors intervene. On the one hand, because we lack, that is, we do not have these follow-up systems … and on the other hand because the students themselves do not have the habit or the culture to tell us what was happening to them." (CEP2)* |
| **Academic results** | 2 | *"If a student enrolls and sees that he cannot continue his studies, he sometimes abandons them." (D2)* <br> *¨ Of those that after effectively as the dean says do not cover the expectations that they believed because maybe there is more workload, it was not exactly what they thought.¨ (VDA1)* |
| **Personal and social reasons** | 1 | *"… personal reasons; I do not adapt with my colleagues, it's that I'm not clear that I need this, I do not know if this will help." (D2)* |
| **Negative attitude at the training centers** | 1 | *"The attitudes in the centers of practices precisely yes that is what quickly implies a negative report of the center, with which easily that they suspend the practicum." (VDP2)* |
| **Parental Status** | 1 | *"…there are other variables sometimes family issues or accidents in your environment, changes in your context, and in a very small case because of a difficulty in getting the studies. This seems to me to exist but it is very small.¨ (VDP2)* |
| **Teachers' attitude towards the major** | 1 | *"A professor of Pedagogy who does not believe in it… they say it in class … because of our own ignorance, we lose students." (CP2)* |

According to the interviewees, the financial situation of students has the highest affect

in their decision of whether to dropout. Students´ inability to support themselves

financially and study full time hinders their study journey especially that most students of public universities come from popular areas. The second highly ranked reason among the interviewees was the mismatch between expectations and content. Many students come to these careers setting different expectations regarding the content of the classes, the workload, the general overview of the career, thus they drop out. Interviewees consider that most students who drop out do it because the career doesn´t fit their personalities or their targets in life. Some interviewees considered that academic results and poor orientation play also a role in the drop out decision of students. Academically weak students feel they do not belong to this career and then drop out as they cannot handle the work, also students who are not well-oriented and do not really know the drive behind their choice, end up dropping out. All other reasons were not of a high importance to the interviewees. In addition, it is worthy to mention that 2 of the interviews refused to rank these reasons as they did not have any proof, research or investigation regarding the topic so preferred not to reply.

### 4.2.2.2 Complaint Resolution Process

Concerning the common question that tackled the complaints, all 10 interviewees think that the students have the complete right to complain, and they usually do it a lot.

*"the students, from the beginning, instead of dedicating time to study, dedicate a part to complain" (D2)*

The complaining process is very clear to all UAB interviewees which assured that it is also well-understood by the students.

*"Here we have a pyramid complaints system, that is, for example when there are problems with the teacher himself, first, complain to the teacher. If they do not find a*

*positive response or complain to the grade coordinator. If not ... the coordinator can*

*not solve the complaint either, come to me as vice-dean. If they can not make the first*

*formal complaint, which is to submit an instance in Academic Management, and then*

*it is the dean in which he solves it and if they do not go to the Rectorat" (VDA2)*

Figure 28 shows the hierarchy of the complaining process; whenever a complaint is

not solved, it goes to a person of a higher position.

FIGURE 28. *THE HIERARCHY OF THE COMPLAINING PROCESS*
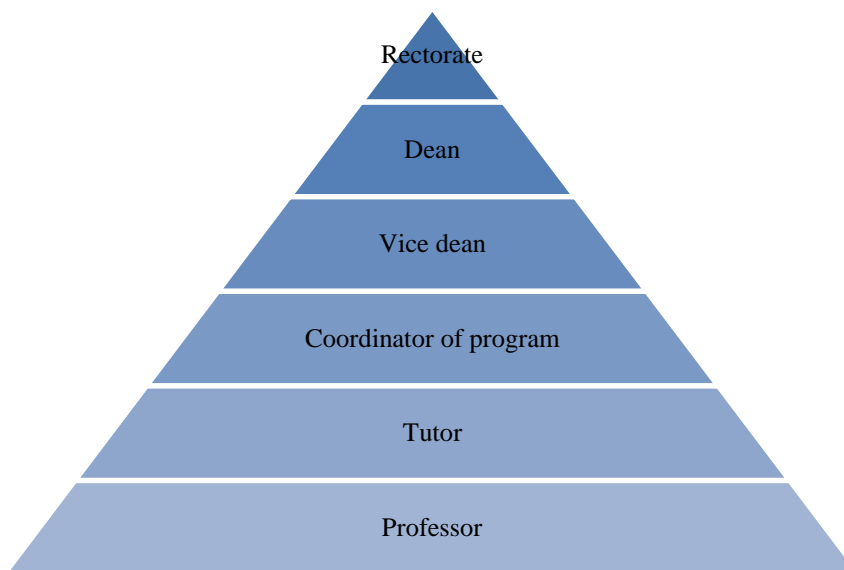


In addition to this process, some vice-deans and coordinators mentioned that there are

several other ways for students to present their requests or speak about their

complaints. They have the delegates of classes who usually meet twice a year with

teachers and coordinators to communicate ideas; the students' council of each faculty

whose members meet every 15 days and give their demands to the relevant channel

through the Vice-dean of students and mobility; and the meetings of the board of the

faculty in which the students' representatives can participate and object.

*"Another way is through the "Consell d'Estudiants". The Consell d'Estudiants is the*

*representative body of students in the Faculty of Education Sciences. Each faculty has*

*a Consell d'Estudiants, and in our case, the Consell d'Estudiants is formed by all the delegates of class plus all the students who have been chosen by the students themselves as their representatives in the faculty meeting. They meet between every 15 days and three weeks they have a meeting of about an hour and they decide issues and also channel the complaints they think are convenient." (VDSM2)*

*"And the other way is through the board of the Faculty, that is, the students who have been chosen by the rest of the students as representatives of the students in the board of faculty, actively participate showing their agreements or disagreements with the decisions that occur in the faculty, with which they have several mechanisms." (VDSM2)*

In addition, the students can give their requests to the "students' lawyer" or defender through the "Síndic de Greuges" or ombudsmen which is considered the most "abusive" way of complaining, or also they can make their complaints public through the registry to reach the dean immediately.

*"They also have what is in the university that is the Síndic de Greuges, which is like a lawyer for the students, that he receives this type of requests, but this would be the most abusive, rarest cases. But it exists and many times the students skip the instances say that they have at their disposal here in the faculty and they go directly to put a complaint there, which is not too advisable because many times we can give a much quicker, much more agile response, and more punctual we can clarify things here in the faculty that if you put a complaint to a higher instance that until the moment of acting maybe it is already." (CPE2)*

As for the UB, the interviewees´ replies were based on experience more than on a clear structure.

*"First, complaints are usually always directed to the teachers. Institutional issues are one thing. This is secretarial, but first, they have to know how to manage the relationship with the teacher. They have to know how to expose it with the order, with peace of mind, and they have to know how to negotiate. In the case where the negotiation does not work, it is when I should enter. But I enter, I always tell them I will enter as a mediator, not to give reason here or to give the reason to him... I talk to one, I talk to the other ... I propose the solutions... if there is a case, because there is a case, where there is no possibility of negotiation, I decide...some things I have to talk to the Cap de Departament." (GP1)*

All 10 interviewees think that the students have the complete right to complain, and they usually do it a lot.

*"the students, from the beginning, instead of dedicating time to study, dedicate a part to complain" (D2)*

The complaining process is very clear to all UAB interviewees which assures that it is also well-understood by the students. As for the UB, the structure seems a bit ambiguous, students usually can complain to teachers, coordinators, or vice deans with no specific set order; no other mechanisms were mentioned as in UAB; however, in both universities, the complaints are analyzed, and if justified and possible to be dealt with, they are fixed.

### 4.2.3.3  Faculty Objectives

Table 17 projects the main objectives of the faculties of education at UB and UAB given by the deans and vice-deans of academic affairs, to see the similarities and differences between the management goals. Apparently, and from what has been said,

the UB is more concerned about the international, local, and social image of the faculty than the UAB which concentrates more on building professionally and socially responsible specialists.

**TABLE 17.** *MAIN OBJECTIVES OF THE FACULTIES.*

| UAB | UB |
|---|---|
| *"To train the best professionals. In other words, to ensure that people who leave the faculty have good technical training, good development as people and that they maintain a certain social commitment. I mean, therefore, we understand the profession from this perspective: technical knowledge, personal development, and social commitment." (D2)* | *"The first objective is the student, that's for sure. Then, the whole subject of degree, teachers, everything revolves around the student. This is the first objective, both from a professional point of view and from a human point of view… we are part of this international ranking in education, the research that is being done in our areas of knowledge is powerful research because it is a research that leaves much of it to participate in European projects, of competent projects, it is published in international impact journals and I believe it is a rising value in our faculty … I believe that this is one of the great values that our faculty has, to be open to our society. There is also a volunteer theme..." (D1)* |
| *"To train professionals who are dedicated to the field of education. Because here the competition is not really important…"(VDA2)* | *"What the faculty itself can contribute humanly and with other types of resources." (VDA1)* |

Although both faculties seem to have different main objectives, in general the two care about both students and external image and collaborations.

### 4.2.2.4 Pre-University Orientation

Related to high school orientation, the dean of UAB considers that it is very "general", and it should be more "personalized" and "deepened" to "orient" students well because they are "forced" to choose a major anyways; such an action can decrease dropout because it deals directly with one of its causes.

*"They are not oriented and they are also forced to choose because that makes the level of abandonment increase. If we are eliminating causes, the level of abandonment would decrease." (D2)*

As for the entrance system to the university, the vice dean of quality and innovation made it clear that the system cannot be played since the whole system is computerized, which eliminates the discrimination between students depending on their family connections at the entrance level of the university.

In both UB and UAB, accepting students in pedagogy is based on the grades of the "selectividad" exam but for primary and childhood education, in addition to this exam, there is a specific additional exam entitled the "PAP, which is Proof of Professional Attitude".

*"Well, it is the qualification obtained in the entrance exam to the University. We do not have any specific proof. It is a test organized by the Government, the interuniversity council of Catalonia, and for the entire Autonomous Community, students pass the exam and depending on their choice, some parts of the exam have more weight." (GP2)*

Based on the interviewees, high school orientation is "general", and it should be more "personalized" and "deepened" to "orient" students well because they are "forced" to choose a major anyways; such an action, can decrease dropout because it deals directly with one of its cause.

### 4.2.2.5 University Orientation

As for the university orientation, both universities have open days, but only in UAB, some visits to high schools are planned to introduce the majors, and there are some

"joint activities" between professors and teachers to help students have clearer ideas about their university studies. As for the UB, they do not do any action unless they are asked by an individual institute at an individual level, according to the dean, it is the secondary school that should guide students and no.

Based on these replies, the study assumes that lack of orientation at the high school level is surely one of the main dropout reasons, the study also confirms that on faculty-level, there is nothing done to inform students of the content of the programs and to clarify their inquiries prior to their first year other than general university events.

*"We do not go to the institutes. It is the same team of institutes that inform the students in any case and guide them. Then if the students consider it opportune, they go to the Hall of Ensenyament, they come to the open days to see what is done in the faculty. But we do not have any work in this sense, or we do not do any action unless we are asked by an individual institute at an individual level. Then we value it ... He is the tutor of the Secondary School that guides students and no more." (D1)*

*"In the High School, they have. In the university not specifically. Before the enrolment yes. We have an open day at the university so we explain what is Pedagogy ... yeah." (VDA2)*

### 4.2.2.6 Personal Support

On a question related to the treatment of minorities and first-generation students, the vice dean of students and mobility states that there is no significant representation of students from migrated families or foreigners in the university, he also refers to some studies that say if 40% of young people with Spanish DNI or native students study at

the university, 40% of the young people whose families have immigrated are not studying

*"that is, its representativeness in our classrooms is much less than its social representativeness, then no ... at this time they are not reaching the University sufficiently, at least, in the studies of Early Childhood Education, Primary Education, Social Education, and Pedagogy".*

The reply of the vice dean of students and mobility assumes that there is no obvious description of the treatment of minorities because they are barely present in the faculty of education at UAB. The replies assume that there is no obvious description of the treatment of minorities because they are barely present in the faculty of education at UAB, and due to the fact that 1$^{st}$ generation students were not mentioned, it is expected that they are also few in numbers.

### 4.2.2.7 Department Communication

In the UB, the information comes from the teacher who detects the problem and informs the head of studies. There is no specific structure for sharing information among faculty members. The information is not allowed to pass without the students' or SAE's acceptance.

*"The teacher informs the head of studies. The head of studies is the one in charge of speaking with the students." (D2)*

*"If a teacher detects that there is a student that has a problem ... the SAE student service intervenes ... they can make a diagnosis too because they have services in psychiatry, psychology, everything ..." (GP1)*

*"It is confidential information … except if the SAE already issued for the teachers, which would be the educational report, the student's educational follow-up, which would be the educational report, the student's educational follow-up … this one can be passed directly to the teachers. Which are recommendations that the SAE gives for so-and-so". (GP1)*

In the UAB, it starts with the professors and tutors, then vice deans, and then if necessary, channeled to the dean. Sometimes it starts from a helping center as PIUNE in case the student goes there which usually happens voluntarily.

*"I am the one who least finds out about those who leave. Those who find out most are the course tutors and the coordinators … It's usually from the bottom up." (D2)*

*"If the problem we have in the practice center, the first step is in principle between the tutor of the faculty and then tutor of the center or the director of the center or coordinator of practices"* and if the problem is very serious to the vice dean of practicum. *(VDP2)*

*"PIUNE informs us we have regular relations and we inform the teachers that they have those students." (VDQI2)*

A main drawback when it comes to communicating sensitive information about students is the data protection law set by Spanish government and that public universities have to follow. It hinders the passing of information from a department to another without the will of the student which might lead to inability to help the student in some cases.

*"No. The only things that can be communicated are health things … we have a strong law of data protection and is the student who decides whether to communicate or not." (VDA2)*

*"Academic Management is the one that manipulates and has access to all this data that in principle is not passed on to the teaching staff." (VDP2)*

*"Here in Spain, there is a question of identity, that you cannot reveal, of anonymization of situations and of not cataloging." (VDSM2)*

*"Only if they want to tell us we know. But it is always by their will." (VDSM2)*

*"The Piune always informs with codes. The code is always the student's code, the NIUB." (CP2)*

*"You imagine a certain type of psychological illness, right? And here we have problems. Here it is true that with Piune we sometimes have to make things very clear. Because if there are some competences, if these students study history, geography, it's one thing. But if they want to be teachers in front of small children, if for example, a person is Bipolar, right? Or it has a degree of schizophrenia, that's impossible. They can not ... Here we have a problem." (VDQI2)*

In addition, there is no specific structure for sharing information among faculty members, this lack of communication was mentioned by several interviewees as a main hindrance of the student follow up process.

*"We meet once and we do it by mailing" (CP1)*

*"The important thing is to know, because then I think the difficulty because you will ask me, but the most important thing in this phase is communication, that is, knowing how a large, very large degree is, one of the largest in all the university, there are many students and a lot of teaching staff involved with which communication is key and coordination. As long as we have the tools to ensure this flow of communication and coordination, then the measures can be activated either because they are already planned and there are protocols, or because if there is no protocol they can be resolved*

*or the necessary measures can be put in place on the progress. You can search ad-hoc*

*for appropriate answers." (CPE2)*

To sum up, in the UB, the information comes from the teacher who detects the problem and inform the head of studies. There is no specific structure of sharing information among faculty members. The information is not allowed to pass without the students' or SAE's acceptance. In the UAB, the communication of cases starts with the professors and tutors, then vice deans, then channel team with the dean if necessary. Sometimes it starts from a helping center in case the student goes there which usually happens voluntarily. There is no specific structure of sharing information among faculty members. There is no set procedure for internal communication, and the information is not allowed to be shared without the students' acceptance.

### 4.2.2.8 Program Satisfaction

- **Program and Content Updates**

Relating to the topic of program content and students' participation in updating it, the dean of UAB mentioned an organized system of curriculum design in which students' representatives are included through commissions and can share their opinions. According to the dean, managing knowledge and "designing new programs" is the university job, and although "students are a fundamental part of our work but they are not the center of it"; however, integrating old students who became professionals can be considered to update programs but new ones only to develop methodologies. As for the UB dean, she differentiated between program and programming, the first is reviewed yearly by the management team, as for the second, it can be "negotiated" with the students if the teacher wants to; it was also mentioned that the faculty of UB

has managed to defy the human resources limitations and formed an innovative team of teachers who "combine research and innovation to reverse what the training program is". Based on these answers, the study implies that although the students are heard, their words will not affect the content of the program or programming unless the management team and the teachers find that beneficial.

As for the relation between quality and students' persistence, the vice dean of quality and innovation praised the quality of the programs at UAB and pointed out the importance of vocation to persevere in such majors.

*"I believe that the programs have quality and the students who want to be teachers or educators, or social educators, do not give up, because they think that the majority have something ... let's call it vocational."*

Based on his observations, students never abandoned a study program at the faculty of education of UAB to continue in another faculty, they always transferred to another major which eliminates the relation between the quality of the programs and dropouts at the faculty of education of UAB.

As for the evaluation of the study programs, table 16 projects the outcomes depending on the replies of the coordinators. Also, based on table 16, the study affirms another time the importance of creating some follow-up strategies to check students' satisfaction through and after finishing their study programs, it also assures that students' lack of satisfaction can be a main cause of dropout and that before any educational update or reform, dropout should be analyzed to decide on the right innovations and changes whether in the content of a program or the management of a department.

**TABLE 18.** *EVALUATION OF STUDY PROGRAMS.*

| Do you think the exoectations of students are met during their studies? | Program Evaluation Procedure |
|---|---|
| *"No ... it is not the best possible program to teach Pedagogy. And this applies to psychology, whatever ... for chemistry..."(CP1)* | *"Every two years ... well, every year we do a follow-up report. A tracking report is more a memory. Every four years we have an evaluation program ..." (CP1)*<br>The content of the subject taught is updated every year, *"the Pla Docent affects each subject, each course, for all teachers the same. It obliges all teachers who are in it to coordinate and make at least the minimum, the plan ... has to be approved. But this is every year, every year." (CP1)* |
| *"Mostly yes. The curriculum is adjusted to the expectations of the students."*<br>*"In recent years ... teachers who come from the external world and collaborate here. This is good because they bring professional practice, they bring things from the world and bring them to the classroom." (CP2)* | *"We evaluate the program every 5 years through accreditations that are official." (CP2)* |
| Yes, *"Because the labor insertion rate is a good indicator to know if we are getting some professionals who are well integrated into the labor market ... This is an indication that what we are doing is doing well or at least within the normal." (CPE2)* | *"We have different instances to follow up on the subjects, such as the surveys of the subjects that are done each semester with which we can detect aspects of improvement there, aspects that do not work well and can intervene, on those cases of lack of coordination or any other type." (CPE2)* |

The program is usually evaluated every 5 years at UAB and every 4 years at UB, but the content of the classes in both is updated yearly. It is worthy to mention that the coordinator of Pedagogy at UB criticized the fact that the changes in the program can never touch the curriculum, they can only improve it through embellishing its content, which according to the study, limits the development of any degree and affects negatively the students' level of satisfaction.

Based on the findings, the study affirms once again the importance of creating some follow-up strategies to check students' satisfaction through and after finishing their study programs. The study also assures that students' lack of satisfaction can be a main cause of dropout, and that prior to any educational update or reform, dropout should be analyzed to decide on the right innovations and changes whether in the content of a program or in the management of a department.

In general, according to several interviewees, there is a thin line between what the students expect and what should be taught based on the program which might lead to students' dissatisfaction.

*" ... I think there are many subjects that the teacher is looking for this feedback. To see if the expectations are met, what happens is that it is often difficult to meet the students' expectations because they want a kind of thing but you have to teach them another kind of thing. I think there is a lot of dialogue in the majority." (VDA2)*

*" In short, I do not know if everything we are doing in reality, the follow-up of the subjects, the improvement plans, are aimed in some way at preventing the students ..., that is, increasing the level of satisfaction of the students. students implicitly decreasing the possibility of them leaving. Therefore, if we can motivate them and make them stay here with us and if it can be satisfactory and useful for their formation, then that will indirectly cause the abandonment to decrease. Therefore, we do not intervene in a situation of abandonment, but we intervene to improve the quality of our programs. Therefore, in very exceptional cases, the university itself has some intervention plans..."(CPE2)*

Nonetheless, according to several, the program content has a direct effect on students and needs to be taken seriously.

*"I believe that from the coordination we do not have a direct impact on the students. But we can contribute to some extent to improve the syllabi together with the teachers who work in this grade. Therefore, we do not have a direct impact on student performance, but indirectly, if it is a quality program or not, it does have a direct impact on student performance." (CPE2)*

In sum, at UAB, the program is usually evaluated every 5 years at UAB and 4 at UB, but the content of the classes in both is updated yearly. It is worthy to mention that the coordinator of Pedagogy at UB criticized the fact that the changes in the program can never touch the curriculum, they can only improve it through embellishing its content, which according to the study, limits the development of any degree and affects negatively the students' level of satisfaction.

Based on the findings, the study affirms once again the importance of creating some follow-up strategies to check students' satisfaction through and after finishing their study programs, it also presumes that students' lack of satisfaction can be a main cause of dropout, and that prior to any educational update or reform, dropout should be analyzed to decide on the right innovations and changes whether in the content of a program or in the management of a department.

- **Atmosphere Satisfaction**

Regarding students' satisfaction, according to the vice deans in both universities, students usually complain about the resources and the physical situation of the building or classes which is understandable by the management team but out of their hands.

*"And of course there are not enough resources. There is always a lack of other resources. But we are in it, we are in a public university, it is not easy to solve things from one day to the next, then here and besides it does not only depend on us internally, here there are many external factors that we do not control…" (D2)*

*" The number of students, we have masterclasses and seminars, and the seminars are quite adequate. Some classes are theoretical and maybe there are 80 students. Obviously, it would be much better if they were fewer, huh? That they were 40, 50, etc. And that the seminars were smaller, but in a situation of crisis like the one we have now the numbers have skyrocketed a bit." (VDQI2)*

Most interviewees are aware of the comments of students regarding the physical aspects of the building; however, it is not in their hands to do any changes as it is a public school and the funds for improvements come from the state.

- **Up to Date Content**

According to the interviewees, some students complaint about the study program during their studies especially in the 1st year thinking they will not be ready to the work field later on.

*"I have not learned anything, I do not know anything, everything is going wrong, what a horror, how I'm going to do it" (D2)*

*"we have more problems for example in the first course, because a first course that is very generalist" (VDP2)*

*"in Education there is always a dissatisfaction because although they have done many practices they have the feeling whenever they are not prepared to practice the profession" (VDQI2)*

*"while they are studying, I think they are critical" (VDSM2)*

However, in future academic years, and when they start working, the level of satisfaction becomes higher.

*"It is later with the passage of time you realize that you have some studies, a career, some values and some skills and a training to be able to work" (D2)*

*"and in the last year, it is usually when they are most satisfied" (VDP2)*

*"So, well, it depends, that is, while they are quite critical and also depending on the degree ... it seems all wrong, or many things wrong, everything ... and when they have finished and have begun to work, they see that they do not, that what they have learned serves them, has ... a certain yearning for the university. They perceive it in another way, so well ... later when they finish their studies, the evaluation is generally positive." (VDSM2)*

Based on the previous quotes, it is clear that according to the interviwees, the judgement of students based on their first study years is not enough and they cannot really understand how much they learned during the program except when they start working and then they end up satisfied.

- **Preparation for Job, Mobility and Internships**

As for the preference to study abroad, the vide-dean of students and mobility does not have a lot of knowledge or knows lots of cases related to the topic; nevertheless, she stated that students are interested in traveling to do "Erasmus exchange", "exchange of practices", and "internships"; however they have to save a lot of money to do so due to most students' financial situation. As for childhood and primary education, they are extremely "regulated" majors, "that is, you must have studied here to be able to teach here".

About the procedure of assignment of internships and their effect on the students' grades, the vice dean of practicum clarified the process of the selection of practice centers which takes into account all students' interests and makes sure the centers are geographically well-distributed. The students are allowed to submit their priorities which are analyzed depending on their records prior to giving them the final assignment. Besides, there is the possibility to make some exceptions to help some students based on "several criteria", the intention to do the training abroad which is highly recommended, and a justified reason such as a bad financial situation to assign a training center close to the students' home or work. The training is of high importance, its failure can cause suspension, it is graded 2/3 by the professors and 1/3 by the professionals. Thus, the study expects that the students will mostly be satisfied with the outcomes of their training programs.

Several interviewees considered practice as crucial for students to know whether or not they are made for the career.

*"For example, I've been a practice teacher. And I realized at the time when I was a professor of practices that the best way to train a teacher was to accompany him with*

*someone who considered that profession was worth or existed. That's what a Primary teacher has: The one next to him is a Primary teacher. It is not normal for a Social Educator to have someone who is not a Social Educator, that a pedagogue does not have someone who is a pedagogue. And that is difficult in Pedagogy." (CP2)*

In general, the internships assignment process is well-organized and mostly satisfying for students. According to the vice dean of practicum, the students' professional training shapes their view towards their study program especially because it is their first "connection with the reality". Students only become aware of the "competencies, needs, and abilities" of their majors when they do their training and they "really face real work", which can lead to a "turn in direction" and in some cases to transfer out or dropout from which the importance of trainings.

### 4.2.2.9 Instructional Support

- **Teacher Selection and Performance follow-up**

The teachers are hired by the "General Directorate of Universities of the Autonomous Community of Catalonia", the departments of the faculty of education only select the teachers depending on the number needed and assigns the subjects based on context or specific criteria. 75% of the teachers have temporary contracts and most work has to be manageable by the 25% which is very challenging and might decrease the quality of education according to some interviewees. However, many mentioned that although the resources are limited, the faculty team has been providing quality outcomes.

*"…The Faculty itself does not have the capacity to hire professors. The department, effectively selects, because the department is in charge of really teaching, is*

*responsible for giving answers to the subjects. So, the department knows if there is a need for a specialist in Experimental Sciences Didactics or a specialist in plastic science didactics..." (D1)*

*" Each department has the autonomy to associate their teachers to the subjects ... Some departments make internal contests to choose the subjects. Some departments are contesting among all, between new and old, and are chosen. And there are departments that the last one arrives because that empty square is left, so you take it. It is a bit of everything." (VDA2)*

*"... it is a great difficulty to give quality to the studies. We believe that we give it, but this 25% of fixed professors, for example, have to assume all the work of management and organization of the faculty, which carries a heavy burden at the organizational, management level." (VDQI2)*

*"There are teachers who do not get involved, some teachers do not participate in all these instances of collaboration and coordination. There is everything. There is everything because it is a very diverse faculty and there is everything." (CPE2)*

The study considers that not giving the faculties the opportunity to choose and hire the professors limits the choices and the options the faculty can have when.

On the question relevant to the students' feedback, usually, general anonymous surveys about the quality of teaching are conducted in UAB.

*" We only have a survey about the quality of the teaching, but very very simple. Well ... like ... "this teacher meets expectations ... from 1 to 5", but it is very basic. It is anonymous. And then you have another one but they can not write down whatever you want but whatever they want ... it's ok. The only people that write are the people that fail so ... ?" (VDA2)*

Also, teachers can themselves check the feedback of their students and try to have a common point between requests and essential content; however, such an action is not mandatory and is based on the teacher's decision and professionalism.

*"It's very difficult. Yeah, because I mean we can discuss with them so we have periodical meetings and we discuss how to improve the evaluation but at the end, if they want to apply the notes it's their decision…" (VDA2)*

- **Faculty Training**

At UB, it all depends what the professors need or ask because trainings and workshops should be based on the necessities of the teaching body.

*"doing a number of hours and courses that are not going to be useful at all, will not revert in the improvement of anything, neither of management nor academic, that is, based on one's own needs." (D1)*

In addition, when such seminars are offered, whether in the UAB or UB, they are not compulsory for professors.

*"Yes. It is not compulsory … the institute of educational sciences offers many courses, seminars, workshops, conferences, we ourselves from the faculty create seminars, workshops, conferences … and research groups … we are in a framework of reflective practice … there is the Academic Dedication Plan there is a direct relationship between the research you do and the teaching you teach and the management that you do." (VDA1)*

*" The university detects problems, and in front of those problems it does … then have a service of formation and support to the teaching staff. This service is not mandatory, …" (D2)*

*"the faculty punctually makes 3 or 4 activities for the teachers throughout the year ... another activity is the evaluation and self-evaluation by Portfolios ...then the university has a service of formation and support to the teaching staff. This service is not mandatory ...so, if a teacher wants to be a better teacher, the university has elements that can be used ... because you have the training because you have working groups because there is money for innovation projects ... the problem is, you have a kind of teacher who does not want to do anything." (D2)*

In both universities, general training from the university and specific activities from the faculty are offered for free to professors if they would like to improve their skills. Attendance is not mandatory which implies that not all teachers are on continuous professional development.

### 4.2.2.10 Financial Situation

- **Scheduling and Attendance – Job Status**

Out of the 4 study programs at UAB, only in Primary Education, the students have the option to choose between morning and afternoon; in other majors, they do not have this possibility and they must attend 80% of their classes which explains dropping out for financial issues. In the case of Primary Education, there is some flexibility in changing the students' schedules depending on their situations and needs to prevent dropout, "each year there are maybe twenty cases" that request changes.

*"Match studies with work. We do not make it easy for them. The students, many students, like many years ago, you could study in the morning, afternoon, night, but at the moment the students have subjects in the morning, subjects in the afternoon, and*

*well, they have to choose a way of living and to work that is not easy for them living most of them as they live with the need to work, right?" (D1)*

*"They tend to be working-class, and the latest crisis of 2008-2009-2010, etc., have done a lot of damage to them, because many of them, more than 70% are working students, that is, they have to work in the afternoons, because it's a morning race, to compensate and enter…"( CPE2)*

According to the interviewees, some students leave their studies and ask for a refund as they found a job and do not want to continue at school. Usually the universities have a standard schedule and all students should respect deadlines; however, some exceptions might happen based on the situation and a few criteria. If there are justifications of the need to work, family issues, etc. the universities are understanding and would support the students.

**TABLE 18.** *TOPICS DISCUSSED IN THE 3RD SECTION OF THE INTERVIEW.*

| Main reasons for dropout | Students' complaints | Dropout: voluntarily or involuntarily | Comparison of dropout rates between programs | Faculty main objectives |
|---|---|---|---|---|
| Content of the study programs and students' expectations | Dismissing policy | Satisfaction with studies in Catalonia | High school and university orientation | Students' satisfaction |
| Students' feedback | Scheduling and support | Equal treatment at entrance level | Relation with the previous alumnus | Quality maintenance |
| Minorities and 1st generation treatment | Professors' assignment | Training's effect on program choice | Students acceptance criteria | Evaluation of the study program |

### 4.2.3    Practiced Prevention Strategies

In this section, the methods and measures practiced on the university level were discussed and analyzed. In both, UAB and UB, there are general centers that help the students in case the latter reached out to them. There are also several general activities to integrate the students in the university and improve their civic engagement. But there are no intensive university methods, strategies, or processes that deal with or work on preventing dropout.The findings are of large interest for the study and prove that the topic has been under-evaluated and barely treated on all levels; state, university, and faculty. Nonetheless, it also shows some individual concern and specific efforts made or intended to be made by several of the interviewees from their current positions to decrease dropout.

The interviews have proven that there is no system or defined policies to take actions to prevent dropout. The only activities that exist are general tutorial actions as Tutorial Action Plan (UAB) that do not deal with personalized cases and centers as Student Attention Service in the UB, and PIUNE in the UAB that help students only when they reached out to them and give recommendations to professors in some specific cases after getting the student´s approval.

*"Here is, for example, the SAE (Student Attention Service). Well, there they have a support of the type of personal itinerary, psychological orientation as well as professional guidance and post-studies and pre-studies..." (VDA1)*

*"We have the student's academic record. And if there is a problem of the type of disability or something of this type, then students are channeled through the "PIUNE". (VDQI2)*

*On the "page cultural dynamization and student participation, there is the strip of activities" (VDSM2)*

### 4.2.3.1 State Dropout Policies

Regarding the Spanish and Catalan strategies to decrease dropout, the interviewees believe that although the government tries to decrease dropout through general actions; however, there is no a set plan or instruments or funding to support the universities in that.

The lack of financial assistance from the state limits the work of the university and faculties in different fields including dropout.

*"We have no suggestion either by the Catalan government or by the Spanish government, or by the university itself. We have no guidelines." (D1)*

*"The General Government of Catalonia have policies to reduce this. And the policies they have made are policies of large numbers. One way to reduce the dropout is some universities have made and allowed the system, for example, set the compensation of notes ... There is neither from the state nor the Catalan state. There are no funds for these things." (D2)*

*"The problem is that it does not give money to the universities, it has lowered the budget by 25% in the last years, it will not dedicate complementary money for a specific topic. Because the issue of abandonment is one ... but it is not the only one." (D2)*

### 4.2.3.2 Faculty Dropout Policies

Some faculty members believed that they should not do a lot to prevent students from dropping out as students are adults and should be responsible for the decisions.

*"No. All this is important but ... all this is a desirable world, but not achievable. Because if we have difficulties to serve students well, we cannot go into nuances in terms of ... abandonment, disability." (D2)*

*"...No, the system is not so organized ... To what extent does the university have to act as the student's father and mother? ... You have to decide what you need, and depending on what you need, you have services in which you can go. To what extent the University must be concerned about such individual issues. What worries me is that in the context of a career detects serious dysfunctions, which is that in this subject ..." (D2)*

Despite that, several faculty programs to support students and decrease dropout are quite similar between UB and UAB. Providing advice, offering tutorials, planning workshops to improve skills related to writing, thinking, etc., providing language courses, professional orientation seminars, planning summer schools, etc. are the types of activities both faculties offer to their students. In addition, in the UAB, there was a mentioning of a satisfaction survey so that students could share their thoughts and could help the faculty improve.

In both universities, the faculties have the will to think of supporting programs for students throughout their studies to prevent dropout. However, according to some interviewees, although the faculty tries to motivate students and help them, there is a lack of contribution from the students´ side.

*"There are students who prefer to go with the girlfriend, who does not devote themselves to studying ...I do not know if we have to do so much of individual support ...But we have other things that can generate better results. I mean, I'd rather dedicate myself to that group of thirty students than to a concrete ..." (D2)*

*"The training environment exists but not always the students take advantage of it. Why? Because they prefer to go to their area where they live or whatever. So we have had training programs with extensive activities that sometimes the level of student participation is minimal. Then we need to get students involved in something other than approving the subject." (D2)*

Founded on the replies of the interviews, the study assumes that the faculties represented through their head of studies, program coordinators, and academic secretariat try their best to be present for the students and open dialogues as they do care about the human side of education. They also play a role in selecting the types of activities the students need based on academic factors. However, although the faculties plan all these activities, several students do not participate which discourages the faculties´ will to help.

In general, the planned activities mentioned are not enough to decrease dropout as there is no individual follow up for specific cases that are in need of support. This implies that there is a necessity for an ongoing follow-up for students especially during their first year which is the most critical one, to prevent them from dropping out due to dissatisfaction though several interviewees think that this is not a doable process.

*To motivate students, "well, we propose that they do and also plan activities that interest them. And they do it, but it turns out that they do it and their own companions are not, because there is a culture of comfort and minimal effort." (D2)*

*"We do not intervene in a situation of abandonment, but we intervene to improve the quality of our programs ..." (CPE2)*

Part 4 of the interviews reflects a general satisfaction in the work of both faculties regarding several topics; however, it shows a lack of satisfaction among all interviewees regarding the law limiting the data access and sharing of information. Such law limits the work of most faculties and professors in assisting specific cases, helping in preventing any major future problems, and preventing dropout.

### 4.2.3.3  Alumni follow-up

In a question that tackled the relationship of the faculties with old alumni, the interviewees mentioned that the level of satisfaction is checked through end of studies surveys, and some of them participate in "research groups", "innovation groups and projects", or "pedagogical renewal movements"; moreover, 75% of the UAB associate professors, are previous students.

This fact states that there is a will to stay in touch with old students; however, this drive has to be mutual to become doable. As for the expansion of connection, it is surely limited to a specific number due to the huge number of graduates from public universities. The study believes that last year's satisfaction survey cannot be considered as a satisfaction index or improvement plan to the study program especially that most students at this stage are not very active professionally and cannot judge from the outside as professionals.

*"Well, the students when they finish the race, they have a satisfaction survey of all the studies. And then we maintain contact with Alumni. The alumni are the students who have left and are working. In addition, the students who leave here usually if they are*

*good students and they want to maintain the relationship, many are in research groups*

*with us. Others are in innovation groups, in projects… especially in this faculty where*

*this 75% of associates are active professors, they are working. Most of them are our*

*students who left recently or left a long time ago. Therefore we have a lot of contacts."*

*(D2)*

The study believes in the importance of checking the alumni of the faculties and listen

to their opinion once they are active in the labor market to check what changes could

be done to make the program better, increase the students´ experience and improve the

link between the studies and job market.

### 4.2.3.4  Student Information

Through this part, the interviewees were asked about the access they have regarding

the student's information before and during academic years. Both universities have no

information collected from the high school level so the student academic and non-

academic background is not checked, and the faculties do not have access to any

information that could help them when dealing with students which prevent them from

preparing any entry prevention activities and programs. In the UB, some entrance tests

are made but are not enough to know personal information about students and in the

UAB, throughout academic years, when information about a student is needed, one

has to request it.

*"During the year of study, we can detect it. Before, we cannot detect. And they can*

*come out with serious problems, but we do not have any mechanism. We are working*

*on it because not only we, this faculty, but the other Catalan faculties have exactly the*

*same problem …there must be some mechanism that allows us to stop the situation in*

*the process because we have a very important social responsibility … these students who have mental problems are in the faculty and do courses and study courses be a therapy for them." (D1)*

*"There are some tests to see the level of competence, the communicative, linguistic competence, and the competence of abstract and mathematical language. However, there may be a person who has mental ... mental problems … they detect in the periods of practices." (VDA1)*

*"From high school to university nothing comes to us. Now, within the university, as a second tutor, I want to know about certain students I go to the coordinator and ask … But of the institutes we do not have that, maybe it could help. But there is a structural problem there because people from hundreds of institutes come to this faculty." (D2)*

Both universities, the UAB and UB do not have access to information regarding students´ backgrounds prior to university entrance. This is due to two main lacks, the first is the weak connection between public universities and high schools which hinders the transfer of data and information regarding students especially about their academic behavior and background. The second is the absence of an organized system that collects and saves basic important information about 1st year students that could allow the professors to know the level of students they will be teaching and some relevant personal information about them.

### 4.2.3.5  Students´ Academic Trajectory

Regarding the follow up of the academic trajectories of students, the interviewees mentioned that there is no established, structured or clear tracking strategy, nor a set system for predicting dropout, or some systematic programs to prevent dropout. It is

not allowed to access any kind of data except in emergencies or if the student requested help. The data protection law is implemented in the public universities, so no information regarding the student could be accessed except if the student decides to communicate them. This entails that knowing the path of students during their studies is not doable in public universities and many students could be dropping out without anyone noticing their absence or trying to support them. The data the academic team receives is mostly statistical with no names so there are not a lot of hints or clear predictors to prevent some students from dropping out.

*"It is difficult to detect it unless it is really going to coincide ... but I also do not see this as a failure, that is, I think that the rate of abandonment as in everything in life would be worrying that there would be a very high dropout rate because that would be indicative of something we are doing wrong, but it is true that sometimes you choose your studies, and they do not cover those expectations ..." (VDA1)*

*"They go and that's it."(D1)*

*"Who knows better if a student has problems, if he can leave, is the tutor of the subject and the coordinator ... and they can try in some way to orient them. Therefore, here is the first link that is closest to the student. Then, these same coordinators and tutors, if they believe that the problem is structural, can directly raise it to the dean." (D2)*

*"... well you know, we can get a report explaining that there is a problem with that student, has a difficulty and what measures advise to respond to this student. Also if at some point there is a more important problem, yes we can ask to look at the student's file to see if there are any issues that we can solve. But the consultation of all this is very strict..." (VDP2)*

Another main drawback of public universities that prevents students´ follow up is the lack of an automated system that allows communication regarding students´ trajectories on all levels, academically and personal. The communication between departments regarding students´ cases is very limited and complicated due to the absence of such follow-up system or strategy and due to the protection of data law that only allows the sharing of personal information upon student´s approval. This entails that some students could be passing in some hard times on many levels and none of the faculty or staff are able to detect that or even share it with other relevant departments to provide the student with the necessary support and prevent dropping out.

### 4.2.3.6  Student Financial Support

Neither the university nor the faculty has to do with the distribution of scholarships; the university can only help with some funding for specific cases.

*"Yes, clearly we have a group of students ... a higher percentage than in other faculties of the university have economic difficulties or need scholarships or grants to continue studies. Usually, they either work or look for systems to continue, but in some cases, they clearly can not." (VDP2)*

*"We are in a Catalan public university. As I said before, the largest of all Catalan universities. Higher education should be practically free, but it is not so, unfortunately. So, there is an important sector of our students that must work, they must personally pay for their studies and they must work. Then it is an added complexity to combine studies with work. And that can be an important factor, the economic issue. Recall also that we are in Catalonia, tuition fees are the highest in the entire Spanish State." (D1)*

The scholarships come from the central state or from the generalitat, they could cover tuition, transportation, etc. However, these scholarships are given for students who prove they come from low income families, but who also have a good passing grade. These measures are not meant to decrease dropout but to facilitate university access. As from the university side, they could give a fund of aid, emergency funds, for only some specific cases.

*"They exist and students can ask for them through the administrative channels that are specified…." (VDP2)*

*"The effort made by the University of Barcelona, even if there are no external scholarships, there is a program of grants called UB Scholarships" (VDA1).*

In addition, the university supports students by giving them payment possibilities as fractioning the payments.

In sum, the universities are doing their best to support students financially; however, they do not have the access or power over the distribution of state scholarships.

## 4.2.4   Recommendations, Demands, and Solutions

Throughout the interviews, the study noticed some individual or group attempts to start new projects or programs to assist students.

At UAB, an orientation committee has been reactivated, to orient students during their academic trajectory in the university and for their professional exit.

*"There is a whole program that is beginning to be implemented in the balance of competencies at different times to try to make each student aware of the competencies that he has and needs to acquire during his career and also to see the possibilities of professional opportunities that exist and that can be developed in the future" (VDQI2).*

The intention from these programs is to provide students with advice when choosing their career, training centers or electives. In addition, the UAB has PAT, a department that offers three types of activities to avoid abandonment, or to accompany the students. First activity is receiving the students when they visit the campus, supporting them when they arrive, and explaining what kind of studies they are going to do, what characteristics they have, and what competencies are needed on an academic and professional level. Second activity is to accompany them in the development of these competencies; for example, linguistic and communicative skills, and third, helping them clarify their career path through professional orientation programs.

Although at UAB, following up the abandonment rate is not a priority, there is an intention to work through a commission on improving the practical side of the major and to include different conferences regarding the career path (CPE2).

Similarly, at UB, the faculty has been trying to implement for some time the Action Tutorial Program (PAT), a program to support first graders. In addition to these programs, the coordinator of pedagogy at UAB is requesting a "gamification for prizes" to encourage students to do a better academic job through grants.

Based on the replies of the interviewees, most of these prevention programs are thought of but they are still in process of whether they would be applied or not. The main deficiency detected throughout the interviews is the weak communication or the inexistence of a structured communication procedure between departments of both universities whether to share information, speak about specific cases, update programs, teaching methods, etc. This topic has been tackled by the coordinator of primary education who considers the most important phase of the process is communication

and coordination "As long as we have the tools to ensure this flow of communication and coordination, then the measures can be activated either because they are already planned and there are protocols, or because if there is no protocol they can be resolved or the necessary measures can be put in place on the progress" (CEP2).

In the last part of the interviews, the interviewees were given the freedom to speak about any measures, improvements, or demands they think are important to ameliorate their job and decrease dropout. Their suggestions are summarized as follows:

- Increasing the financial assistance from the state to invest in the minds and empower the educators and research centers so they could make more efforts to detect students with socio-economic problems.

 *"there is no policy to really deepen, to allow research and innovation in this country, and when I speak of the country I do not mean Only Catalonia, I mean Spain in general now. So, while there are no policies that really reinforce the issue of research in education and innovation in education, the empowerment of university teaching staff is very little"* (D2),

- Choosing professors with teaching experience to be able to reflect the real-life *work "When you are imagining your class you imagine your real class, but here in the faculty there are a lot of teachers that have never been in a High School or Primary …"* (VDA2). *"It's a big problem for us because now we have in the faculty to program with some high school to send our teachers there. Teachers that have never been in a high school to spend one year there to see how teachers work. Our teachers can spend one-year teaching and seeing what happens. If not … as a teacher … you're teaching how to teach without having experience at all .."* (VDA2).

- Clarifying the identity of pedagogy and social education to students prior and during their academic years to decrease dropout.

  *"I think it's a problem of identity of the pedagogy because people do not really know ... it's too general"* (VDA2).

- Having always a competent team to manage the faculty.

  *"there has to be a competent team that knows how to manage it. For this it is necessary that there is also a good infrastructure"* (VD1).

- Improving systems to be able to detect and assist students with difficulties to avoid suspension and failure.

  *"we have in this faculty a very clear question and that is that at the level of suspension there are very few that suspend, which is not a matter that concerns us, but what worries us is that it discriminates well in the notes"* (VDP2).

- Providing problematic cases with more support and attentive tutoring during their training.

  *"these students have more particular, more specific accompaniment during their practices. They must have some tutors who are more attentive and prepared"* (VDP2).

- Supporting new projects.

  *"Strengthen PAT a lot in the first year, but also during the other courses. Because the first year is essential, but other courses also, because the abandonment is minor but more serious"* (CP1).

- Improving the quality of the university through raising the level of professionalism and implementing some innovative projects and teaching methods.

  *"to be more demanding with the quality and with the professional competencies…"* (VDQI2).

*"… Some teachers develop very interestingly teaching innovation projects in their classes with their students… Therefore, there is a lot of wealth… However, it can be improved. You can always do something better to make it a little more attractive, more current, more more more. This has always been a constant I believe in the faculty. This concern for continuous improvement. It is constant, I never think that it has gone out to maintain this, maintain it and improve it if it can be"* (CPE2).

- Improving the work situation of teachers and continuing the yearly training and follow-up of new teachers.

  *"improve the work situation of the teaching staff, that is not in our hands. However, what we can do is a very important thing, that is a process of training new teachers who come in each year"* (VDQI2).

- Encouraging international experiences through additional financial assistance for students *"there are aids but they are ridiculous. That is, there are aids but if you want ... in an Erasmus study, the maximum amount of money you can give to go out is 300 euros per month"* (VDSM2).

- Clarifying the relation between the majors and the work field "what can be done best is to mark clear trajectories of both labor insertion and academic training".

- Creating a follow-up system with university graduates.

  *"I believe that we establish follow-up plans… When they leave here, what are they doing? …"* (CP2).

- Continuing the improvement of the study programs.

  *"… I believe that studies have to improve, I believe that in the state they are in at this moment it is very good because there is a lot of professorships, many interesting things*

*are done … However, it can be improved. You can always better something to make it*

*a little more attractive, more current …"* (CPE2).

- Motivating students through rewards.

- Improving formal and informal coordination and communication between faculty members.

*"would improve the coordination among the teachers … it is important to communicate among us not only at the teaching level but to know what is taught in other subjects to know and how I can improve. Even this informal learning, this organizational learning could be improved in the degree to know what others are doing and learning"* (CEP2).

In the figure below, a summary of the main prevention strategies suggested by the interviewees.

**FIGURE 29.** *SUGGESTIONS FOR PREVENTING DROPOUT SUGGESTED BY THE INTERVIEWEES*



| Social Economic Measures | Institutional & Academic Measures | Occupational Awareness Measures |
|---|---|---|
| Supporting new and innovative projects. | Professors with teaching experience. | Clarifying the skill set needed for each major and the link between the major and the work field. |
| Financial assistance. | Improving systems to detect special cases. | |
| Encouraging international experiences. | Improving the quality. | |
| Improving the work situation and continuing yearly trainings. | Ongoing support for students before and after graduation. | Clarifying the identity of pedagogy and social education. |
| | Improving continuously the study program. | |
| | Improving formal and informal coordination and communication between faculty members. | |
| | Competent team. | |

Although some interviewees in the UB and UAB consider that dropout is not a major problem and do not think it is necessary to come up with some retention solutions to prevent this phenomenon from happening in the faculty, most interviewees considered their interviews as a time to reflect on a phenomenon that they might have never thought of before. They shared their ideas, interests, questions, and recommendations, considering that succeeding in a major needs "permanency" which is not an easy decision if the students have any kind of problems and are not well-supported or surrounded.

*"We have no program of measures because it is not a problem for us. Therefore, we respond as we get through the heads of study, but we do not have a problem of abandonment. Because it is not a problem" (D1)*

*"Well, we do not think it happens very often. Not once in a while. Perhaps we should look for an intermediate point, but often there is no abandonment rate that we have located." (VDA2).*

*" first, the abandonment is very little, but in any case, improving the quality of the University is always possible… I would say that it is not so much of abandonment currently. At the beginning of the economic crisis, yes, it was in some cases, in some cases. Not actually. In any case, it is a situation where there are fewer students in the University" (VDQI2)*

*"I think there is not much relationship between what we do and the dropout. That is, in this faculty. Because the dropout is not for academic reasons … I think we did not make this reflection about because we do not need that because we have one of the most demanded faculties and we do not have dropout" (VDA2),*

## 4.3 Surveys

### 4.3.1 Procedure

The survey intended to explore the students' point of view regarding their study

programs, and support offered by their university and faculty. The surveys were conducted in the

classes with the support of the professors. The official language of the survey was Spanish in

order to make it understandable to all participants. The survey was based on the literature review

and previously conducted interviews; it entailed 48 questions that cover the different components

that might predict higher education dropout. The survey started with an introductory

and explanatory paragraph, after that, came several multiple-choice and open-ended

questions regarding the students' study programs and sociodemographic backgrounds.

Then, followed the rating-scale questions to check the students' rate of satisfaction

towards their study program, professors, tutors, administration, support, etc. Also,

there were some multiple-choice and open-ended questions to examine the students'

awareness regarding the topic of dropout, the support programs offered by the

university and faculty, and their view and future vision towards the major they have

chosen. At the end of the survey, the students were given the choice of whether to

leave their contact or not to participate in the advanced steps of this study. The students

had most of the time the option to write any other choice or any additional comment.

You could find the complete survey in Spanish in Appendix A.

Students were mostly in their second year (45%) and their third (44.5%), only 7.1% were in their first year, and 3.3% in their fourth. 43.6% of the students started their studies in the academic year 2017-2018, 29.9% in the year 2016-2017, 16.6% in 2015-2016, and all the others ranged from the academic year 2010-2011 till 2014-2015. 52.6% of the students started their studies in the Faculty of Education in 2017-2018 which means that 9% of these students were doing another program at the UAB before transferring and starting their studies in Education. 78.2% of these students were less than 23 years old, 13.7% were between 23 and 25 years old and 8.1% were older than 25 years old. 64.9% of these students had a part-time job, and 62.6 % of them were registered in the morning schedule. Only 10.4% believe their participation in extracurricular activities is excellent, all other answers ranged from satisfactory, needs amelioration, and unacceptable. 58.8% of the students believe their parents support towards their education is excellent, 30.8% think of it as satisfactory, and 7.6% consider it needs to be better, and 2.4 % think of it as unacceptable.

Based on the survey, the graph below shows the difference between students' personal efforts at home and their academic outcomes.
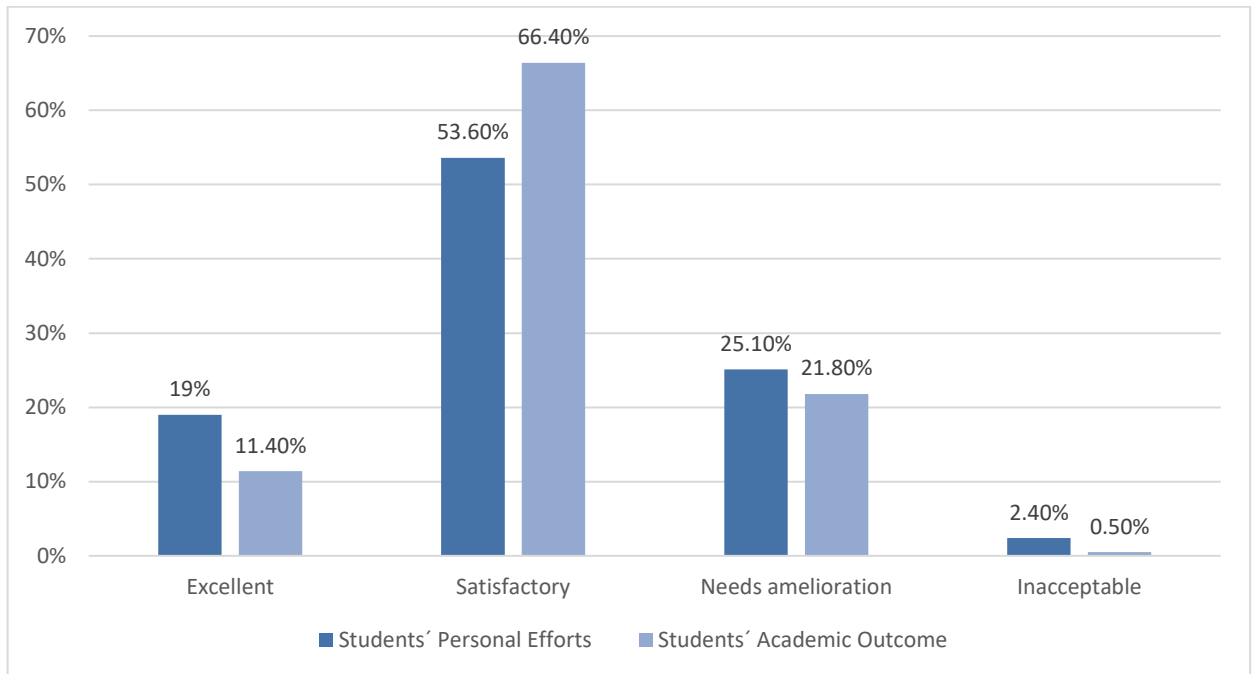
Lack of Orientation prior to university entrance has also been discussed by the students during the surveys, Although 57.8% of the students who filled in the survey said that they received orientation regarding different majors during the secondary level, many mentioned that such orientation was minimal and general. As for the orientation received at the entrance of the university, 61.1% considered that there was not enough description of what to expect from the program they chose.

FIGURE 31. *PERCENTAGES OF STUDENTS WHO RECEIVED ORIENTATION PRIOR TO UNIVERSITY LEVEL*
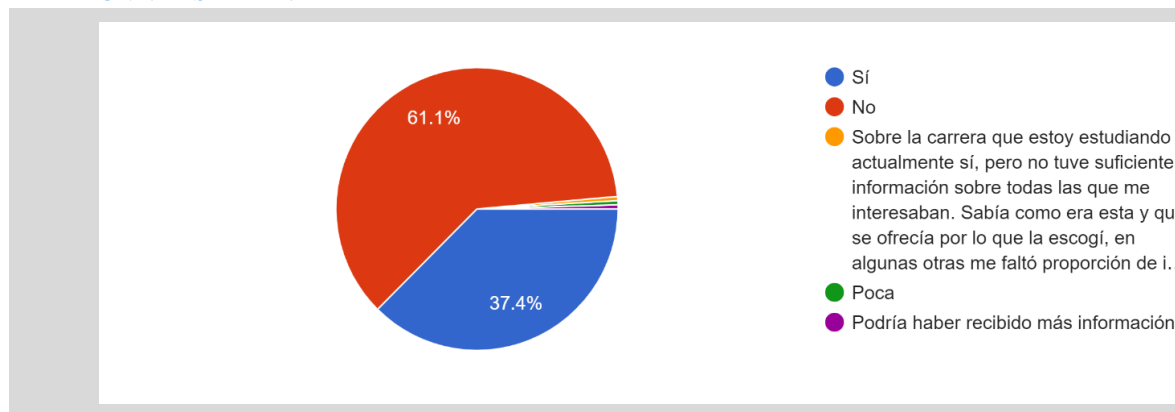
## 4.3.2 Measures

The study uses the QDA Miner Lite program to analyze the interviews qualitatively.

Dropout consideration predictive questions used a 4-point scale ranging from unacceptable (1) to

excellent (4). The items collected from the questions were grouped into 5 different predictive

factors (Appendix B includes all details regarding the items and relevant questions).

• **Program Satisfaction (Program_Sat).** Among the items of this group, there are the following: Program Satisfaction, Atmosphere Satisfaction, Up to Date Satisfaction, Content Satisfaction, and Job Preparation. The reliability of the items was .77.

• **Performance (Performance).** This category contains Personal Motivation Efforts and Academic. Performance The item's reliability was .68.

• **Financial Support (Financial_Support).** Mobility Support, State Support, and Logistics Support could be found in this category. The reliability was .64.

• **Institutional Support (Institution_Support).** This predictive category includes Personal Support, Academic Support, Administrative Support, Department Communication, and Complaint Resolution. The reliability of these items was .77.

• **Instructional Support.** This category includes only one item, Professor Performance (ProfPerf_Sat). Tutor Performance was included in this category, but the reliability was low since several students mentioned that they were not aware of the existence of such a position in their faculties.

The independent variables or predictors of this study are the following: Program Satisfaction, Performance, Financial Support, Institutional Support, and Instructional Support. In addition to these, some predictors as Participation in Extracurricular Activities (Motiv_extraC), Family Support (Fam_support) will also be taken into consideration based on the effect they have on the dependent variables. As for Tutor

Performance (TutorPerf_sat), Knowing a Dropout (Know_dropouts), they will not be taken into consideration as their effect is minor.

In addition, the relation between the years of progress (Year_prog) and the dropout thoughts will also be discussed.

### 4.3.3 Results

**TABLE 19.** *MEANS (M), STANDARD DEVIATIONS (SD), AND BIVARIATE CORRELATIONS OF ALL VARIABLES.*

| | M | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dropout_thoughts | .41 | .49 | (--) | | | | | | | | | | | | |
| Transfer_out | .38 | .48 | .38** | (--) | | | | | | | | | | | |
| Turnover | .97 | .15 | -.06 | -.00 | (--) | | | | | | | | | | |
| Program_Sat | 2.45 | ..45 | -.26** | -.19** | .10 | (.77) | | | | | | | | | |
| Performance | 2.89 | .57 | -.28** | -.16* | .13 | .06 | (.68) | | | | | | | | |
| Financial_Support | 2.24 | .61 | -.08 | -.09 | .08 | .31** | .03 | (.64) | | | | | | | |
| institution_Support | 2.45 | .5 | -.18* | -.04 | .05 | .58** | -.03 | .35* | (.77) | | | | | | |
| ProfPerf_Sat | 2.6 | .63 | -.19** | -.14* | .05 | .53** | .09 | .23* | .40* | (--) | | | | | |
| Year_prog | 2.44 | .67 | .20** | .01 | .10 | -.19** | .06 | -.02 | -.26** | -.09 | (--) | | | | |
| TutorPerf_sat | 2.4 | .73 | -.08 | -.07 | .08 | .31** | .06 | .21* | .29* | .33* | .12 | (--) | | | |
| Motiv_extraC | 2.24 | .95 | -.10 | .06 | .14* | .18** | .13 | .12 | .12 | .10 | -.07 | .18* | (--) | | |
| Know_dropouts | .85 | .35 | .16 | .12 | -.06 | -.13 | -.03 | -.01 | -.13 | -.05 | .14 | .08 | .08 | (--) | |
| Fam_support | 3.46 | .74 | -.12 | .14* | .14* | .00 | .11 | -.02 | .02 | .03 | -.03 | -.03 | .08 | -.04 | (--) |

- *Note:* *Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed).

The correlation, reliabilities, means, and standard deviations of the study variables can be found in table 18.

A simultaneous binary logistic regression analysis was conducted to predict whether the thoughts of dropout could be predicted by program satisfaction, performance,

financial support, institutional support, instructional support, and years of progress. The data from 211 students were used to predict the criterion variable, with having thoughts of dropout as 1, and not having thoughts of dropout coded as 0.

Hosmer and Lemeshow test showed significance when all variables were included, so we reran the logistic regression removing financial support as it was the least reliable between items (.64), leaving only significant variables as program satisfaction, performance, institutional support, instructional support, and years of study, and obtained a non-significant result of .289 > 0.5.

If we were to assume based on the null model that no participant has dropout thoughts, we would be right 58%. Wald 4.65 is significant at p=.031 which means that there is a 58% chance of participants being among those who are not thinking of dropping out.

When the predictors were added, Chi-square indicated 43.28 df = 5 and p < .001 showing that the model is predictive of dropout thoughts. Nagelkerke R Square indicated that the model accounted for 29% of the total variance. The model showed to be able to predict participants who will not have dropout thoughts at 80% and those who will have dropout thoughts at 63%. The model has correctly classified 72.6% missing to accurately classify 27.4% but representing a significant improvement over the constant-only model. The model has increased the predictive capacity from 58% to 72.6% improving the prediction accuracy by 14.6%.

For every one-unit increase in performance, there is a 74% increase in the possibility of not having dropout thoughts, ,b = -1.32, SE = .33, Wald(1) = 15.45, p = .00, Expβ = .265. Every one-unit increase in program satisfaction, there is a 70% increase in the possibility of not having dropout thoughts, b = -1.19, SE = .539, Wald(1) = 4.9, p =

.027, Expβ = .303. Each year students' progress in the program is twice likely that they fall into the dropout thoughts category, b = .757, SE = .275, Wald(1) = 7.551, p = 006, Expβ = 2.131. As for institutional support, and professor performance, although b was respectively -.07, -.43 which means that the less students are satisfied with both, the more they have dropout thoughts, both items were not significant in comparison to others in the model with .87, .20.

**TABLE 20.** *DESCRIPTIVE STATISTICS FOR A (STUDENTS HAVING DROPOUT THOUGHTS) AND B (STUDENTS NOT HAVING ANY DROPOUT THOUGHTS).*

|  | A | B |
|---|---|---|
| F1_Program_Sat | 2.32 | 2.55 |
| F2_Performance | 2.69 | 3.02 |
| F3_Financial_Support | 2.18 | 2.29 |
| F4_Institution_Support | 2.38 | 2.59 |
| ProfPerf_Sat | 2.46 | 2.71 |

Based on the results section of the survey analysis, we could consider that the thoughts of dropout becomes higher when students are not satisfied with the program content, their personal academic performance and efforts, the support offered by the institution whether personal or academic, professors' performance, and the process of resolving complaints. An interesting point to highlight is that the more the students go deeper in the program, the more the thought of dropping out occurs to them which is a highly alarming finding.

In addition to the previous findings, here are some charts based on other predictors that would help us understand more the data:

**FIGURE 32.** *DROPOUT CONSIDERATION THROUGH THE STUDY PROGRAM TRAJECTORY*
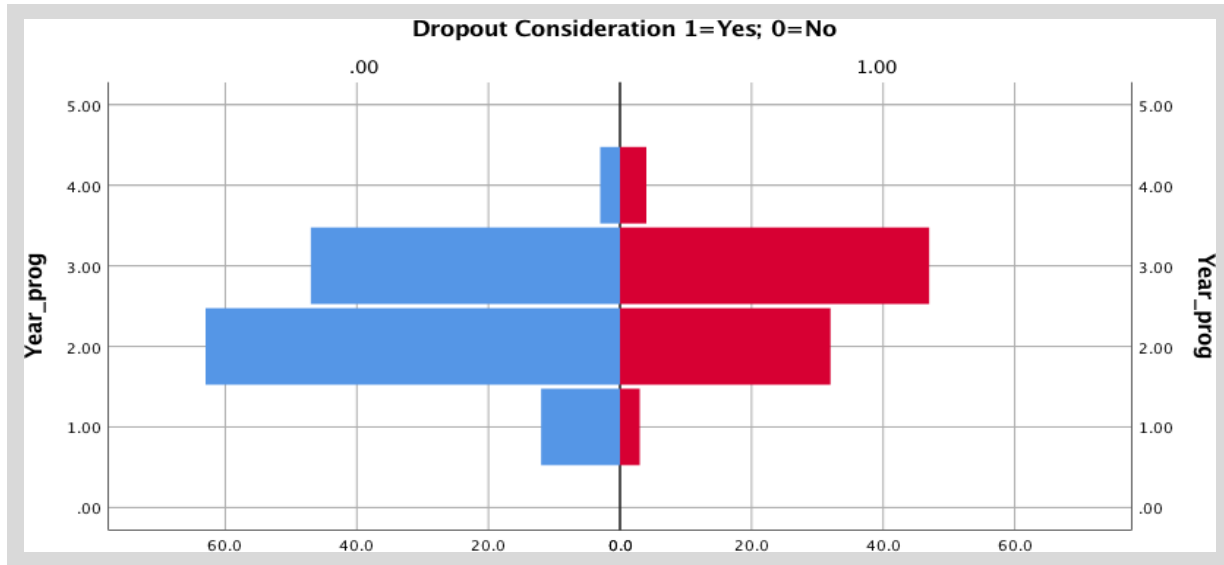


Based on figure 32, most students who are considering dropout are usually in the 2nd and 3rd the year which can be related to the students' deception from the content or treatment.

**FIGURE 33.** *DROPOUT CONSIDERATION*
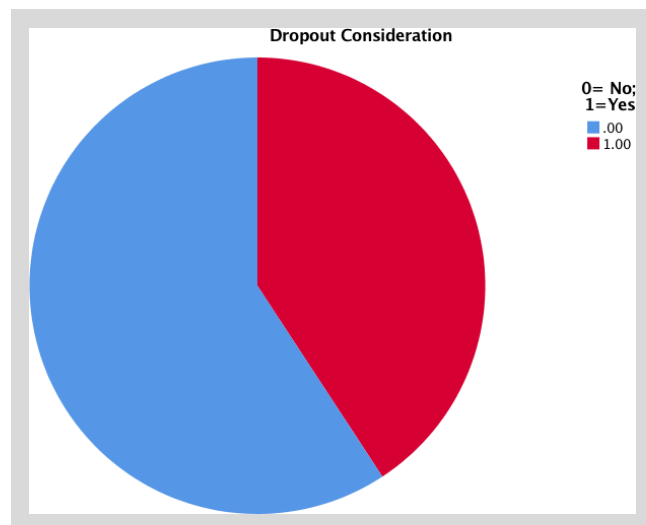
Out of 211 students, approximately half of them are still having a dropout thought which is quite alarming considering that most students were from the 2nd and 3rd year of their program.

**FIGURE 34.** *DROPOUT CONSIDERATION IN RELATION TO PART-TIME JOBS*
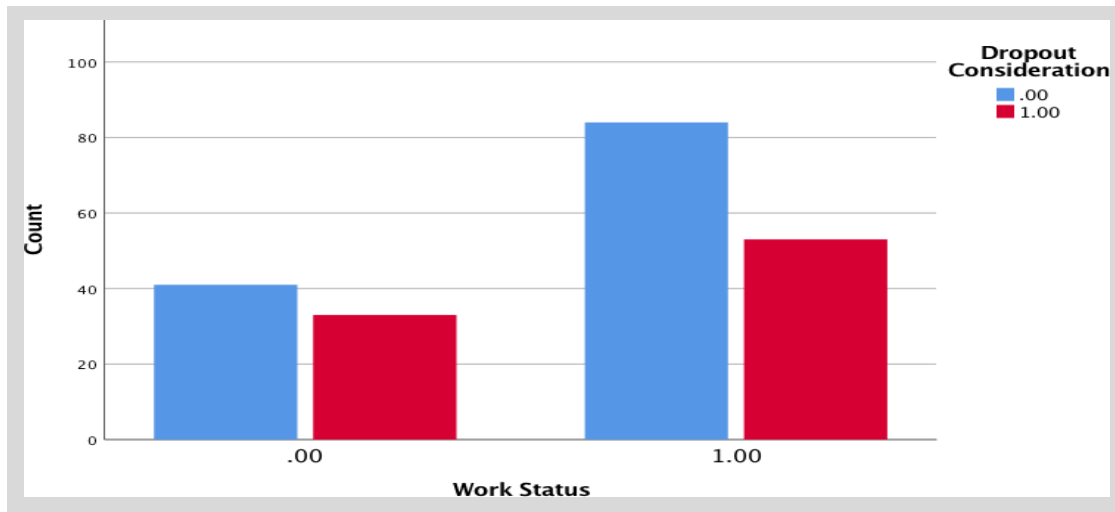


Based on the figure above, people who are working are less likely to think of dropout than people who are not working, which implies that people who have some responsibilities are aware of the importance of education to have better life circumstances more than those who are

not working.

**FIGURE 35.** *DROPOUT CONSIDERATION BASED ON STUDY PROGRAM SCHEDULE*
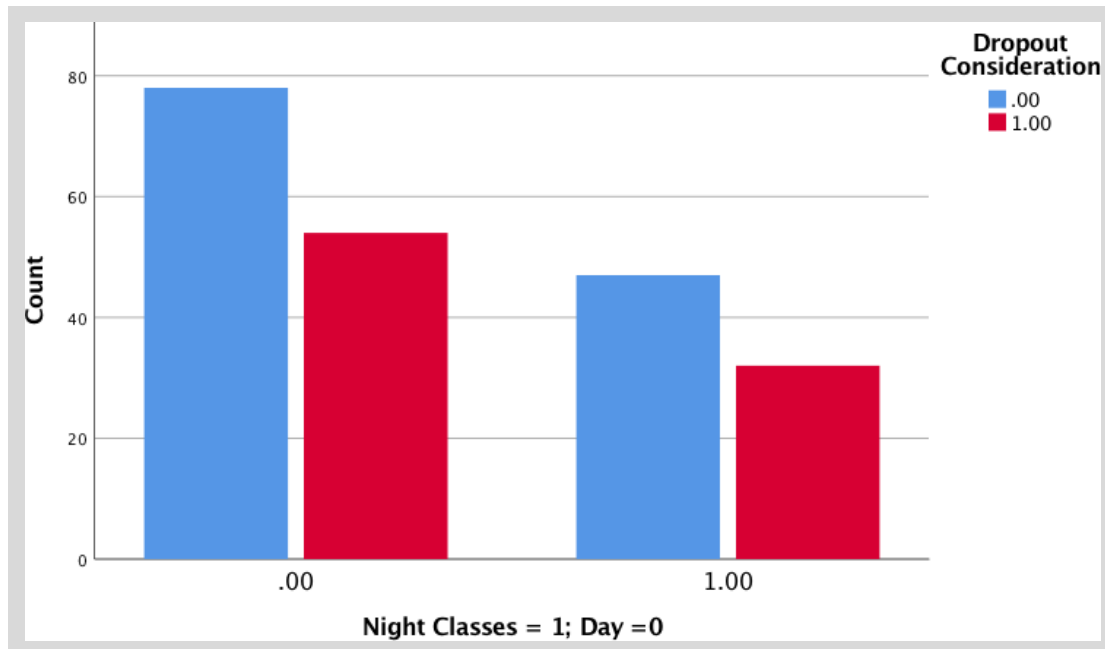


After observing the figure above, and based on its content, and depending on the percentage of people having morning or afternoon classes, we could say that the percentages of people considering dropout is higher among those who study at night rather than those who study in the morning.

In addition to the previous results, in a question that asked students to rank dropout rates from the most to the least important, the students answered as follows.

**FIGURE 36.** *DROPOUT FACTORS ACCORDING TO STUDENTS*
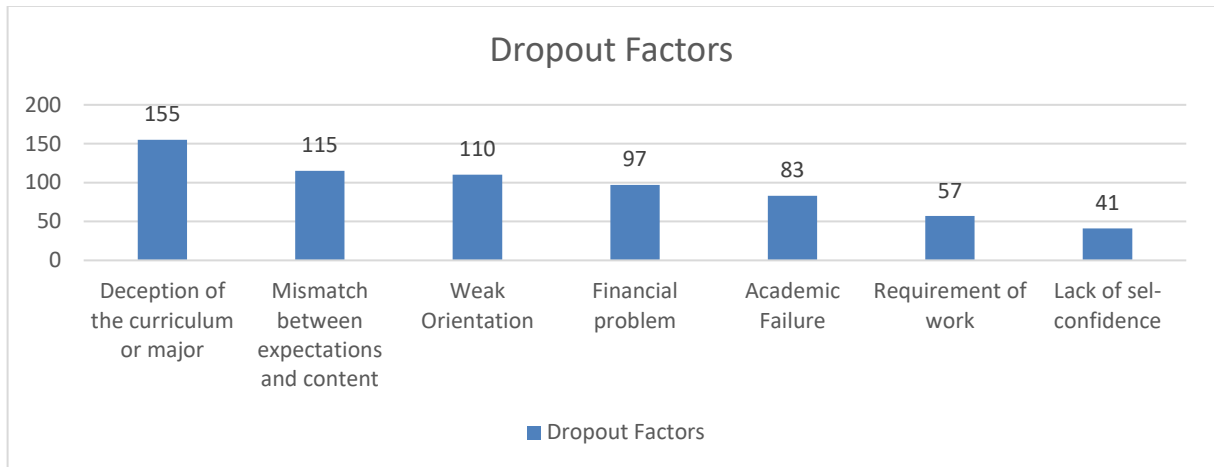


In another question that asked students to place chronologically the reasons due to which they decided to continue studying even in the moment of doubts, their main answers were in the below order:

1- The love of teaching and education
2- The benefits of working as a teacher
3- The content of the program
4- Previous postgraduate experience

The survey showed that although 40.8% of students this of dropping out and 38.4% of transferring out, 97.6% of the students believe that they will end up completing their university studies. In case, they would decide to change university, 68.6% think of changing to another public university in Catalonia, 16.1% of studying abroad, and all others between public universities in Spain, or a private one, or did not know where to go.

Another important point shown by the survey is the unawareness of students regarding the programs offered by the university to help students and the programs offered by the faculty to help students. On the university level, 28.9% of students know of the language center, 27% of the international sports center, 21.8% of the working abroad

service, 15.2% of the employability service, 11.8% of the health assistance, 10.9% of the psychological and speech therapy services, 9.5% of PIUNE, 7.6% of the network services, as for all others, they stated that they do not know any type of services offered by the university to students. On the faculty level, 67.8% knew of the language courses, 38.4% of counseling and tutoring, 21.3% knew of the existence of tutors, 16.6% of summer programs, 8.5% of support groups, 2.4% of remedial courses, and all others stated that they do not know any support activities offered by the faculty.

Below the replies of students to several topics on which they have the opportunity to comment.

- **Reasons of Thinking of dropout**

Based on the survey, 40.8% of students had thoughts of dropping out of the program. The reasons were several; however, most were related to deception from the content of the program that did not meet some students´ expectations, the methodology of some teachers and the lack of practical activities.

*"Because the subjects and the career, in general, have discouraged me a lot"*
*"Because it is a career that does not motivate and they do not take subjects that are useful or dynamic."*
*"Because of the social climate that has been experienced during these years and because of the attitude and methodologies of some teachers."*
*"Because there is a lot of theory and almost no practice. Bearing in mind that in the future we have to work with people. In addition, there is no motivation and what they teach us does not serve us for our future."*

*"In the first year, due to the demotivation of the unnecessary subjects for my training. It did not meet previous expectations. There are also teachers who leave much to be desired and who are not precisely good role models for my training. In addition, the climate of my class group does not favor continuing studying."*

*"I thought that the degree would be more enriching and that I would really learn resources to be a teacher."*

*"I do not like how the degree is focused nor what we do seems to be very useful."*

*"Boredom, lack of desire, lack of money, boredom, anxiety, and stress. It's not how I thought."*

*"It is a career that should motivate you ... and frankly, there is a lot of work and a lot of incoherent content."*

*"For not finding meaning/utility to what is done at the university in terms of my future profession. Also because there is a lot of work to do at home and sometimes it does not allow me to reconcile it with my work life and with everything that comes with being independent with your partner and having a flat.´*

All other students have not had any thoughts of dropout due to their love for the profession and the fact that in case they need to work in teaching, they need to have the degree although several projected their dissatisfaction with the teaching methodology and content.

*"I like my career and I want to work from it."*

*"Because it's what I've always wanted to do and I can't imagine doing anything else."*

*"Because I want to be a teacher and getting a degree in education is the only way."*

*"Because I know I have to stop by if I want the title."*

*"I am happy with my performance and effort, although it may be greater."*

*"Although I am not satisfied with the degree, I want to dedicate myself to teaching and I take it as a phase of access to the teaching body. Like the driver's license."*

- **Reasons of Thinking of Transferring Out**

The survey has shown that 38.4% of students had transfer out thoughts. Some of the reasons they shared were related to career choice and some were about the deception from the program offered. Career choice deceptions were mostly an outcome of the selectividad exam that did not give the option to some students to even try to do their 1st career option so they ended up doing Education, which was their second choice, and they do not feel fulfilled through it.

*"Because there are other Careers (of humanities such as anthropology or sociology) that I think I like better and are better focused"*

*"Because they did not plan the career as I thought. I would like to do art history"*

*"Because I have always wanted to study veterinary medicine, but having a humanistic baccalaureate and not a scientific one I have not been able to."*

*"Because this career was not my first choice, but early childhood education."*

*"I like my career but I don't know if I am qualified enough to carry out my profession."*

*"I would love to do a more specific course so that it would give me experience for life and thus be able to feel more prepared to carry out a university career."*

As for those who did not think of transferring out, most of their reasons were relevant to their love for teaching, education in general, its mission and values.

*"Because I really like the interaction with my classmates and the debates that arise in class about education."*

*"The work it prepares you for"*

*"The values that are taught, the new ways of teaching."*

*"The possibility of being able to dedicate myself to teaching and to train future generations in values"*

*"I have not considered changing my career because there is nothing else that arouses my interest"*

*"That they present us with another type of way of educating, more beneficial for children"*

- **Familiarity with someone who dropped out from the faculty of Education and reasons.**

131 out of 211 students who did the survey knew someone who dropped out. The reasons were mainly four, expectations not met, profession chose wrong, academic failure, and personal reasons.

*"Yes, due to lack of knowledge of oneself and what they like."*

*"Yes. In discovering new studies that have aroused your curiosity."*

*"Yes. She realized that the profession was not for her."*

*"Lack of interest in what you study."*

*"If due to financial problems and lack of motivation."*

*"Yes, for work reasons.*

*"Yes, because he did not like teaching."*

*"Yes, motivation with the subjects."*

*"Due to lack of motivation and lack of time, between work and studies."*

*"Because of the low expectations of the career."*

*"Because the career does not motivate and the contents are not very useful."*

*"Yes, for failure and academic pressure."*

*"Due to lack of motivation and lack of time, between work and studies."*

*"Yes, because like everyone else, he was bored in class. Lost the illusion."*

In addition to all previous information collected through the surveys, the students had the opportunity to share some recommendations and improvement ideas. In the table below, some of their quotes were distributed in different categories based on the improvement area they suggested and after that a figure with all their suggestions was prepared to share with the faculties.

TABLE 14. *RECOMMENDATIONS FOR THE UNIVERSITY AND FACULTY TO SUPPORT VULNERABLE STUDENTS*

| Evaluation | Related students comments |
|---|---|
| 1- **Support Activities** | *"Help programs and activities"*<br>*"Give them more attention and try to find resources to help them continue."*<br>*"Provide them with resources and studies."*<br>*"Make help available to you at all times through tutorials or other meetings"*<br>*"Make help or consultation programs. "*<br>*"Give them more support of the kind they need"*<br>*"Offer them personal guidance and support"*<br>*"Try to get closer to the individualities of each student"*<br>*"More financial and psychological support, all students have stress and a lot of anxiety and depression and that they never take into account"*<br>*"Serve with resources and support"*<br>*"Adapt to individual student situations"* |
| 2- **Communication** | *"Maintain good communication with the student, try to adapt the schedule if possible ... "*<br>*"Listen to us and try to apply the changes that are proposed, in addition to offering more help"*<br>*"Better communication and organization"*<br>*"Take their needs into account"*<br>*"Have empathy. "*<br>*"Listen to them and stop bureaucratic roles. Serve people as people and not as robots. "*<br>*"Communication between them, support and listen to them"*<br>*"Comments made by students are not taken into account"*<br>*"Less arrogance on the part of doctors, and more communication with the school."* |

| | | |
|---|---|---|
| 3- | **Content and Methodology Update** | *"That they change the methodology and that they allow doing practices to schools that are closer to your town"*<br>*"Improve resources, spaces, and methodologies taught by the teaching team. "*<br>*"Adapt the courses to today's world. They are obsolete"*<br>*"Adapt the contents and activities to work"*<br>*"Instead of having a tutor for a class of 80 people, assign a tutor who will be the reference for part of the class. As an individual tutor to raise doubts, concerns. I think that in the university we lack advice in this regard"*<br>*"In the curriculum there are super unnecessary subjects, it should be more focused on how to teach and not so much on theories. Also doing 4 months in 4 years of English and 4 months of French is useless, it should be done for 4 years and with a degree of importance, 1 hour a week is a joke."*<br>*"Many improvements and coordination between subjects are missing! Contents are repeated to us."*<br>*"It would be better to work with a reduction in the number of students in the seminars and class group."*<br>*"Should change the methodology of the race. Less masterful and more practical. The teacher is forged with a group of students, not sitting in a chair with a reclining arm."* |
| 4- | **Problem/Complaint Solution** | *"Make things easy and not put more problems into the matter"*<br>*"Offer more help and a space for dialogue to solve the situation"*<br>*"Understand your situation and find a strategy or solution adapted to your case and apply it. "*<br>*"Take more into account your complaints and proposals"*<br>*"Give them an answer. Find out about the situation ... "*<br>*"Know the opinions they have"* |
| 5- | **Motivation** | *"Create motivation"*<br>*"Encourage them and help them achieve all their goals"*<br>*"Provide help and motivation"* |
| 6- | **Financial Support** | *"Cut prices"*<br>*"Give scholarships"*<br>*"offer more scholarships for students with a large number of expenses"* |
| 7- | **Workload** | *"Reduce the demand for work at home, it is supposed to be a continuous assessment, not semi-face-to-face, we don't even have time to breathe, at least for those who take it seriously. And reduce prices"* |

Below is a summary figure of the solutions suggested by students.

**FIGURE 37.** *SUGGESTED PREVENTION MEASURES AS SUGGESTED BY THE STUDENTS THROUGH THE SURVEY*

| Social Economic Measures | Institutional & Academic Measures | Occupational Awareness Measures |
|---|---|---|
| • Financial support<br>• Psychological support | • Awareness to complaints<br>• Individual attention<br>• Course content and teaching method update<br>• Organization of tutorship<br>• Follow-up plan to support students<br>• Organized communication (student/teacher- Among team)<br>• Better planning and more flexibility in teaching plan<br>• Counselling to improve soft skills<br>• More activities related to the study programs | • Update of the content of the programs to fit the market expectations<br>• More visibility of information<br>• Continuous orientation activities |

# DISCUSSION AND CONCLUSIONS

## 5.1 Introduction

Although much knowledge has been accumulated regarding higher education dropout (Bean et al., 2001; Hasbun et al., 2016), and several prevention measures (Bean et al., 2001; Chen, 2008; Christenson et al., 2012; Dovigo and Casanova, 2017) and policies were thought of as "No Child Left Behind Act, 2001"; "Lisbon 2000" and "Europe 2020" to decrease and prevent higher education dropout, many critical questions have gone unanswered. For example, how can dropout reasons be identified? How could we visualize the connection between factors that shape the student´s decisions regarding their studies? How can higher education institutions continuously decrease dropout rates through implementing the right dropout strategies? This study formulated two multi-theoretical models to answer these questions. By understanding and combining all views and theories that tackled dropout, this research explains how students' decision of whether to drop out is shaped by different dimensions starting from the student personality characteristics to his/her relation and view towards the surroundings and the institution. In other words, the thought of dropout occurs when different factors from different dimensions emerge simultaneously decreasing the student´s intention to continue studying thus leading to dropout. By projecting the reasons for dropout through the model presented in this research, educational institutions would be able to observe the effect of each on students and implement the relevant prevention solutions to either prevent dropout or redirect it to transfer out.

Throughout this section, the different research questions projected in the introduction will be reviewed and analyzed based on the literature review and the findings.

## 5.2 Discussion and Contributions

### 5.2.1 Dimensions of dropout

**Based on the previous theories and studies, what are the main predictive items of dropout, how can they be distributed, and how can the connection between the different dropout factors be simplified and identified?**

The study presents the "Dimensions of Academic Dropout" wheel that places all the predictors of dropout extracted from the literature review in one model to help in raising awareness on all factors that institutions should be aware of to prevent dropout. This work pertains to identifying the antecedents that could lead to students' dropout from higher education. The "Dimensions of Academic Dropout" wheel (Naaman, 2018) has been created to provide universities and educational institutions with an overview of dropout antecedents. This model has helped in dealing with two of the main limitations of previous studies: the difficulty in determining the reasons why a student drops out of a program and the inattention to possible relationships between factors that affect students' decisions (Tinto, 1975; Cook, 2010). As the model tackles the different aspects of a student's life from personality to internal features, external and academic factors in addition to the institutional factors that influence the student's choice; it has managed to combine all previous theories that dealt with dropout. Psychological related to individual features, sociological, and economic caused by exterior reasons, organizational affected by institutions, and interactionalist combining both individual and environmental elements (Chen; 2008). This model facilitates the projection of dropout antecedents and allows more easily linking between them, it

contributes as a tool for the institutions to decrease dropout rates that place institutions in a negative light and influence future enrollments.

The model was influenced by "The Dimensions of Diversity" wheel of Gardenswartz and Rowe (2003) which presents the aspects of diversity that drive and affect a person's behavior in the workplace. The model includes five layers that embody each a different dimension.

1- **Personality.** It represents the main features built at an early stage of the student's life and is affected by all dimensions.

2- **Internal dimensions.** Uncontrollable physical and psychological aspects of a student that cause people's pre-judgments based on what they see.

3- **External dimensions.** Most aspects are controllable and refer to a student's relationship with the outside and affect people's choices in careers and connections.

4- **Academic dimensions.** An additional layer to the original model of Gardenswartz and Rowe (2008). They include the academic features that distinguish a student from another.

5- **Organizational dimensions.** A layer representing all the cultural aspects of the institution that can have a direct effect on the student's academic trajectory and influence the way people are treated and their development within the organization.

**FIGURE 38.** "*THE DIMENSIONS OF ACADEMIC DROPOUT*" *WHEEL (NAAMAN, 2018)*
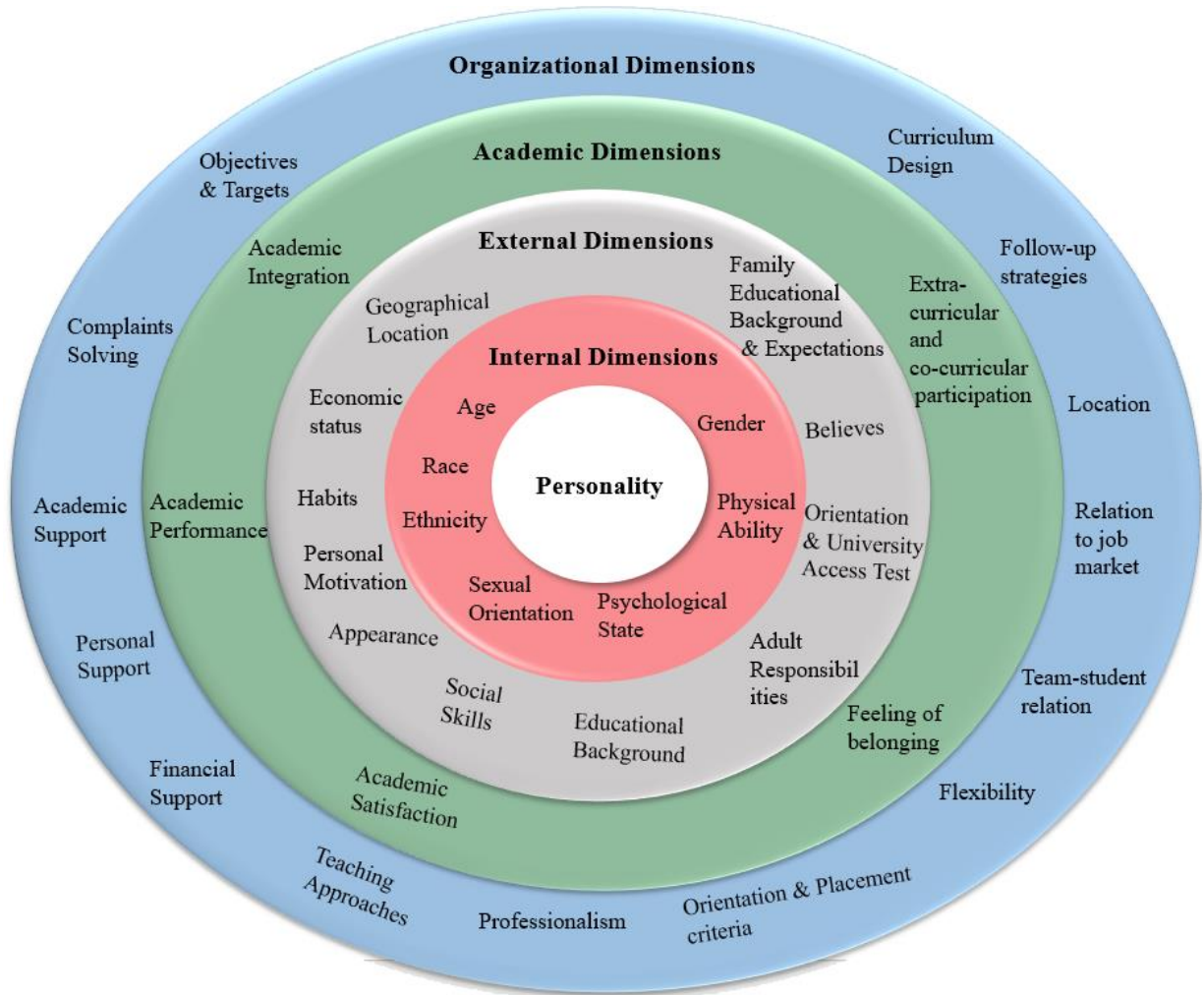


- **Personality**

The core is Personality. Students' academic performance has been linked to both cognitive and non-cognitive factors (Bergold & Steinmayr, 2018) which include students' personality characteristics that affect students' motivation and approach to the learning process (Hazrati-Viaria, Rada & Torabib, 2011). Bergold et al., (2018) explained the relation between the most important 5 facets of personality "Neuroticism (N), Extraversion (E), Openness to Experience (O), Agreeableness (A), and Conscientiousness (C)" with Academic Performance. A high level of N affects

students 'academic achievements negatively as it is associated with high anxiety. High levels of E and A are usually related to class activeness and good reputation. Students with high scores on O have shown higher and more strategic learning abilities. As those with a high level of C, have proven to be goal-oriented and high achievers (Bergold et al., 2018).

- **Internal Dimensions**

Age, race, gender, ethnicity, physical abilities/disabilities, psychological state, and sexual orientation are all internal factors that might lead to dropout. Going back or starting university studies at an 'unusual' age has been considered as a reason for permanent dropout due to the discomfort it causes to the student (CREATE, 2010) similar to cultural diversity as race, ethnicity, and gender (Hasbun et al., 2016). White upper- and middle-class men and women are more likely to graduate than African American minorities and poor ones (or); in some cases, being ethnically different can even cause devastating "posttraumatic stress disorder (PTSD)" to students (Gentry, 2014). Being a female student, one has more tendency to drop out due to difficulties in social integration opposite to male students (Larsen, Sommersel, & Larsen, 2013). Besides, two-third of disabled young adults do not complete their university studies due to their environment that is not well-equipped to cope with their conditions (Smith, 2014). As for sexual orientation, the "cross-cutting" pressure caused by the surroundings of LGBT students could add more challenges to the lives of these students and cause dropout (GLSEN, 2016).

The psychological state of students has also been considered an important dropout factor as dropout or retention decisions are merely individual decisions taken

depending on it (Khan, 2017). Bean and Eaton's (2001) model designates some pre-entry psychological individual characteristics that students already have when entering college due to their prior teenage experiences. The way students perceive their self-esteem and efficacy affect them greatly at the higher education stage and throughout their studies. Students build new psychological characteristics that can either lead to academic and social integration and motivation which consequently lead to persistence and loyalty towards the institution or deteriorate the students' self-perception of efficacy and confidence which then lead to a personal decision of dropping out.

- **External Dimensions**

Factors that tackle the student's relationship with their surroundings vary from family-related to economic, geographical, and personal. Most students living on campus have an interesting experience and are more satisfied and integrated socially and academically than those living elsewhere (Jones, 2013). Several studies show that structural campus diversity allows minority and majority students from diverse races or ethnicities to build positive relationships and enrich their knowledge in cultures which increases their will to graduate (Winkle-Wagner & Locks, 2020). Studying on campus, helps students grow open-mindedly through accepting others, raises their readiness to active collaborations, and leaves them with remarkable college experiences eliminating the danger of dropping out (Nareeba, 2019). However, integration is not easy for all students. Historical underrepresentation of some minorities negatively affects the integration process of some new generation students, especially that several "institutional norms" contradict the values and beliefs of these students' families or origins which can lead to alienation and dropout (Devi, 2020).

According to the National Survey of Student Engagement- NSSE (2005), a quarter of college students are first-generation¸ from minority groups whose parents did not even manage to finish high school (Ewell, 2010). Therefore, most of these students have less family comprehension and support regarding education and are unaware of the academic and social challenges waiting for them in college life. Coming from disadvantaged socio-economic backgrounds in which students have weak family support (Romero, Riggs, & Ruggero, 2015), academic skills and study habits increase the risk of dropout (Cabrera, Tomás, Álvarez, & Gonzalez, 2006; Casanova, Cervero, Núñez, Almeida, & Bernardo, 2018). On a similar stand, the social attainment theory of Blau and Duncan (1967) considers that the educational background of the family members especially the father, and their prestigious jobs affect the educational choice of individuals and their first occupation (Côté, & Furlon, 2016). Ethnicity also puts several students at the risk of dropout as incidences of racism and discrimination have been frequently observed in higher education institutions whether among students or faculty (Harden-Moore, 2019). Therefore, a student's status achievement is dependent on many factors that highlight the relationship between inequalities among social classes and education. Tinto (1993) noted that the position of individuals and institutions in the society's rankings is essential in dropout choices since social, economic, or ethnic pressure can affect students' selections.

Economically, students from good socioeconomic backgrounds have a greater chance to succeed throughout their school and university due to the advantages and support they have access to and their ability to afford university studies (Chen, 2008; Finkel & Barañano, 2014). Several students with adult responsibilities as full-time workers or children are at a high risk of dropout due to their inability to balance their

responsibilities, whether financial, personal, or educational (Kehm, Larsen, & Sommersel, 2019).

Student´s personal motivation plays an important role in their study journey. Having a positive motivation enhances perseverance, efficacy, and focus during the academic journey. Motivated students tend to be more engaging in their study journey in opposite to those lacking personal motivation and self-belief (Martin, 2002).

Moreover, the lack of orientation after secondary studies and the low academic performance of students during high school is considered as a major cause of unreadiness for higher education which boosts the risks of dropout (Rodríguez-Gómez, Feixas, Gairín & Muñoz, 2012). Students from different backgrounds who were well-prepared academically in high school and graduated with good grades are usually expected to graduate successfully in college unlike those with poor high school education (Páramo, Araújo, Vacas, Almeida, & González, 2017). Besides, several countries require secondary qualifications before university application. These pre-university exams directly affect the student´s higher education access and choices as they limit their accessibility to programs and universities thus influence their educational attainment (Dee & Jacob, 2006).

- **Academic Dimensions**

The academic dimensions interact with the other factors that directly influence the trajectory of the students during their studies. According to Tinto's model on students' attrition (1993), there is a "sociopsychological interplay" between students' traits (skills, education, intentions, and commitments), the challenges waiting for them at university (psychological, social, and organizational), and the surrounding

environment. The stronger the social and intellectual integration is, the less is the dropout risk; the less the students are academically integrated, the more they consider dropping out. Program satisfaction also plays a crucial role in affecting students´ motivation and study behavior (Suhre, Jansen, & Harskamp, 2007). Besides, based on Quadri and Kalyankar (2010) academic performance is very important in predicting students who are passing in tough situations during their school years. Campus size (Tinto, 1993; Diem & Wolter, 2019), the available resources, and relationships between institutions and workplaces could also affect students' academic decisions and behavior (Chen, 2008; Lauder & Mayhew, 2020).

Extracurricular activities can also predict school dropout since dropping out from any of these courses is an indicator of "behavioral proxy" and disengagement tendencies (Hasbun et al., 2016); students refusing to get involved in co-curricular activities or having a hard time being integrated socially in university groups have more tendency to drop out from their first academic year (Reschly, 2020). According to Bean's attrition theory "beliefs shape attitudes, attitudes shape behaviors, and behaviors signal intents"; students' experience with the institution and its rules, in addition to their view for its objectivity and staff behavior, shape their attitude towards it which affect their feeling of belonging and their decision of dropout. In sum, most theories consider that students have their prejudgments and expectations on how to manage their time at university, and how the relationships with their surroundings and institution should be. Thus, dissatisfaction in these areas can affect their behaviors, attitudes, in addition to their social and academic performance, and thus lead to dropout (Behr, Giese, Teguim Kamdjou, Theune, 2020).

- **Organizational Dimensions**

Organizational dimensions cover all aspects offered by the organization to the students whether in terms of program quality or human resources. Students arrive at the university level having already built different experiences with previous organizations that shaped their attitude towards learning and educational institutions. At this point, changing the students´ views and their feelings towards the new institution depend on several factors like the attitude of the institutional staff when delivering services (Schultz., 2020), the balance in school authority when dealing with studies´ requirements, and the student-teacher relation (Christenson et al., 2012). Lavrentsova (2019) believes that small institutions usually manage to create a positive experience for students as they provide them with consistent individual attention and effective student-teacher learning contact. Moreover, small-size institutions are usually located in small communities which helps in creating a strong connection between the students and the communities thus increases the feeling of belonging and decreases the thought of dropout.

Another important factor of Organizational Dimensions is academic support and flexibility. Institutions with weak or non-existing academic support for students, and with no flexible options regarding study plans and schedules push students to lose motivation and put them at a high risk of dropout. Similarly, underdeveloped curricula and low learning standards; are negatively associated with dropout thoughts (Suhre et al., 2007, Christenson et al., 2012). Besides, studies have shown that many educational institutions are academically underprepared to transfer the necessary knowledge and skills for students to enter the job market. Such a fact increases the students´ doubt and

feeling of unreadiness for the labor market which pushes them to dropout (Rodríguez-Gómez et al., 2012, Rodríguez-Gómez, Feixas, Gairín, & Muñoz, 2015).

Regarding institutional objectives, two types of colleges have a negative influence on students' success, those "externally oriented" and those with a "collegial ethos" (Berger, 2002). The first includes institutions that care more about their image than their students´ learning and the second contains those that do not see a connection between the relationship of faculty and administrative staff with students´ learning.

In addition to all previous factors, the lack of financial support puts students at a high risk of dropout (Arendt, 2012). Any decision to invest money to carry out university studies is based on one's financial abilities, to decide whether to finish their studies or not, students intend to calculate the degree cost and the expected future profits (Maman & Rosenhek, 2020). If for any reason, the student doesn't have enough financial means to carry out his/her studies and is not offered the necessary help, dropout will be the only solution.

Another main factor is the disappointment with the quality of orientation, and the ineffective guidance when choosing the field of study at the university level (Arias Ortiz & Dehon, 2013). Any deficiency through this stage lead to drop out or transfer out as the students who are considered as "experimenters" will be facing unprecise study decisions (Rodríguez-Gómez, Meneses, Gairín, Feixas, & Muñoz-Moreno, 2016). Students who do not enroll in their first choice due to failing the university program entrance exam or to the limited number of places will have less commitment to their studies and are at risk of dropout (Vries, León Arenas, Romero Muñoz, & Hernández Saldaña, 2011; Porto & Soares, 2017). These students will show academic

dissatisfaction and a lack of motivation as their whole life journey will be affected (Heublein, 2014).

To summarize, the matching between the academic programs, policies, target, mission, and purpose of both institutions and students have a great effect on students' persistence; there must be a positive relationship between organization and individual to create a sort of institutional satisfaction that can lead to perseverance in studies, a sense of belonging in students, and a decrease in dropout chances. The school follow-up in all these matters is highly crucial; however, the intervention is only possible when students are at high risk and accepting to share and speak of their problems.

As previously projected in the "Dimensions of Academic Dropout" Wheel, dropout factors are many, some directly related to the student and some others to the relation of the student with the institution. The "Dimensions of Academic Dropout" Wheel facilitated the identification of these factors and the drawing of combinations between them. In its second part, this study focuses on controllable factors that can be targeted to decrease dropout. These factors are mostly located in the Academic and Organizational dimensions as they are controllable by the student or the institution. Out of these factors, the focus was mostly on years of study progress, content satisfaction, academic performance, financial support, institutional satisfaction, and instructional satisfaction.

## 5.2.2 Dropout Antecedents in Education Studies in Catalonia

**What are the main antecedents of dropout in Education studies in Catalan public universities, and where are they placed on the "Dimensions of Academic Dropout" wheel?**

Having analyzed previously the data collected in document analysis, interviews, and surveys, and considering that the outcomes or dependent variable to be studied as Thoughts of Dropout, this section will discuss the main reasons for dropout identified in the two Catalan public universities.

One important finding of the study is the significant relation between the seniority of the academic year and the thoughts of dropout. The analysis found evidence that the more students are progressed in their study years at the faculties of Education in the two Catalan public universities, the more the thoughts of dropout occur to them. This entails that throughout their university years, students´ general satisfaction decreases and they feel unready to start their professional career.

The results of the binary regression have demonstrated that the most important reasons for dropout at the faculties of Education in the two selected Catalan public universities are program satisfaction and academic performance. Financial support has proven to be of non-significance so was removed from the equation. As for institutional support and instructional support, they showed low significance when compared to others through the binary regression; however, as individual items, they had significant correlations with dropout thoughts.

The section below will discuss each of the dropout categories tackled in the study.

FIGURE 39. *MAIN CATEGORIES OF DROPOUT FACTORS IN CATALAN PUBLIC UNIVERSITIES*

| Program Satisfaction | Academic Performance | Institutional Support | Instructional Support | Financial Support |
|---|---|---|---|---|
| •Content Satisfaction<br>•Up to Date Satisfaction<br>•Atmosphere Satisfaction<br>•Job Preparation | •Personal Motivation<br>•Efforts and Academic Performance | •Personal Support<br>•Academic Support<br>•Administrative Support<br>•Department Communication<br>•Complaint Resolution | •Professor Performance | •Mobility Support<br>•State Support<br>•Logistics Support |

- **Program Satisfaction**

Based on the quantitative analysis carried out for the surveys, dropout thoughts become higher when students are less satisfied with the program. Being deceived of not having their expectations met throughout their studies has been a comment that many interviewees shared with us during the interviews when discussing the program satisfaction as a dropout factor.

For several interviewees, such a deception generates difficulties for students thus lead to dropout from studies and increase the distance between the student and the institution. From another point of view, some interviewees mentioned that the lack of Orientation might mislead the student in choosing an unsuitable major which would lead to drop out, and the selectividad exam limits the students´ choices.

These percentages are reasonable as, during the interviews, both universities (UAB and UB) mentioned that they have open days to support orienting student, but only in UAB, some visits to high schools are planned to introduce the majors, and there are some "joint activities" between professors and teachers to help students have clearer ideas about their university studies.

Document Analysis has also shown that a high percentage of students drop their studies after their first year, a fact that is directly related to the lack of orientation after secondary studies (Rodríguez-Gómez, Feixas, Gairín, & Muñoz, 2012).

When discussing the curriculum, the surveys show that the more the students go deeper into the program, the more the thought of dropping out occurs. Unfortunately, some interviewees criticized the fact that they are not allowed to do any changes in the curriculum, they can only improve it through embellishing its content and making it slightly up to date, which limits the development of any degree and affects negatively the students' level of satisfaction. For example, at the UB, every two years they do a follow-up and every 4 years an evaluation program, as for the UAB, the program is evaluated every 5 years through accreditations.

Regarding the atmosphere, interviewees mentioned that students usually complain about the physical situation of the building or classroom but not about the general atmosphere, a point that was reflected in the survey when the question tackled the atmosphere of the university and 70.6% of the students found it satisfactory.

As for the skill gap between the studies offered and the labor market, the interviewees shared a common dissatisfaction from the students´ side who think they are not prepared to work in education; such belief was also reflected from the students´ answers in the survey; 46.9% of them believe the programs needs some improvements to decrease the skill gap. The quantitative analysis shows that the fewer students feel prepared for the work field, the more they tend to think of dropout, However, interviewees considered that all these feeling will fade later when one realizes "that you have some studies, a career, some values , and some skills and a training to be able to work", "and in the last year, it is usually when they are most satisfied", "but later

when they finish their studies, the evaluation is generally positive".

The regression results show that the relation between the thought of dropout and program satisfaction that includes curriculum design, program content, and job preparation was significant and consistent with some earlier studies (Suhre et al., 2007, Christenson et al., 2012, Gairín et al., 2014) on the relation of quality standards to dropout. There is evidence that students´ feeling of unreadiness to the job market demotivates them and might disrupt their study programs (Rodríguez-Gómez et al., 2012, 2015). Students' dissatisfaction with the program´s relationship with the labor market influences their dropout thoughts. The students feel ready to the marketplace when they are satisfied with the offerings of the program, and they are provided with the financial, institutional, instructional, tutorial, and complaint resolution support by the university. However, according to the findings, the more students get closer to graduation, the numbers show that the students feel less prepared for the job market. Results demonstrate that the study programs must carry out some improvements to decrease the skill gap.

- **Performance**

The performance which includes personal motivation, efforts, and academic performance is an item with noticeable reliability that negatively affects the thoughts of dropout.

As mentioned by the interviewees, students tend to drop out if their results are not satisfactory. 42.7% of students consider that academic failure is one of the causes of dropout; most academic progress is measured through grades that are indicators of students´ success. Having passing grades influences the students´ integration in the university and increases the feeling of belonging to the institution and the major.

Most students consider that their efforts and academic outcomes are satisfactory although according to several interviewees, students do not take advantage of all the academic support provided by the university to help them improve their grades.

Besides, the study has also revealed that dropout thoughts are affiliated with student performance is correct; an outcome that is in line with previous studies. Student performance which includes personal motivation, efforts, and academic performance is an item with noticeable reliability that negatively affects the thoughts of dropout. A noticeable percentage of students consider that academic failure is one of the causes of dropout; most academic progress is measured through grades that are indicators of students´ success. Having passing grades influences the students´ integration in the university and increases the feeling of belonging to the institution and the major (Allen, Robbins, & Casillas, 2008; Aulck, Velagapudi, Blumenstock, & West, 2016).

- **Institutional Support**

Based on the quantitative analysis, we could consider that the thoughts of dropout become higher when students are not satisfied with the support offered by the institution whether personal or academic and with the process of resolving complaints. Although not significant when entering them into the regression equation when accounting for the variance due to the other predictors, institutional support and especially in its two items, complaint resolution, and weak orientation in addition to instructional support, have proven to be significant.

Weak student performance is also linked to weak orientation at the university level (Ortiz et al., 2013) when choosing the major that suits them the most. Besides, the choice of a major could also be limited by the weak orientation at high school, some

types of pre-university entrance exams; for example, the "Selectividad" exam in Catalonia which limits the students´ possibilities (Rodríguez-Gómez et al., 2012), and the low academic performance at the high school level which might prohibit students from choosing the major they want (Rodríguez-Gómez et al., 2012, 2015). Truly, in line with the ideas of Páramo, et al. (2017), it could be concluded that students from different backgrounds who were well-prepared academically in high school and graduated with good grades are usually expected to graduate successfully in college opposite to those with poor high school education.

Similarly, ineffective complaints resolutions policies and procedures decrease students 'satisfaction rate which lowers the quality of students´ performance and leads to dropout (Christenson et al., 2012). Most of the students´ answers have shown a lack of satisfaction in the complaint resolution process, the outcomes have shown that the more complaints are solved, the more students are satisfied with most features of their studies, and the less they think of dropping out; however, unfortunately, the result show that the more students are advanced in their studies, the less they witness complaints resolutions. This entails that the thought of dropout becomes higher when students are not satisfied with the support offered by the institution whether personal or academic and with the process of resolving complaints. Based on the results, few of the students were able to recognize the support programs offered by the universities noting a lack of awareness from the student side. Such results refer to weak communication from the university side regarding the offered services which surely has a negative influence on student's decision whether to drop out as it shows a lack of attention to students´ needs and weakens their feeling of belonging to the institution.

Several interviewees have mentioned some programs to support students during their studies academically or psychologically; however, few of the students were able to recognize such programs. The UB interviewees mentioned the student assistance service known also as the academic secretariat and the students head of studies for academic support, and some different conferences, workshops, seminars to help the student get ready for the labor market.

As for the UAB, interviewees mentioned that there are some general services that the university offers to students like courses on study techniques and service centers. In the faculty of Education, there is even a mentoring program to attend students who have any questions, in addition to yearly professional orientation seminars to observe the students´ professional and personal skills and their development.

Besides, there are general centers that help the students in case the latter reached out to them. There are also several general activities to integrate the students in the university and improve their civic engagement. But there are no intensive university methods, strategies, or processes that deal with or work on preventing dropout. Although these services seem marketed well for the faculty members, the student survey shows a lack of awareness from the student side. According to the survey, 28.9% of the students know of the language center, 27% of the professional sports, 21.8% of the foreign employment office, 15.2% of the employment services, 11.8% health assistance, 10.9% of psychological services, 9.5% of UAB students know PIUNE, and 7.6% know of the IT services. Several students mentioned that they are not aware of the presence of any of these programs. As for the tutorship offered by the faculty to students, 39.8% found it satisfactory, 37.9% considered that it needs to be improved, 10% found it unacceptable and all the others said they still didn´t have a

tutor. Such results entail weak communication from the university side regarding the offered services which surely has a negative influence on students´ dropout as it shows a lack of attention to students´ needs and weakens their feeling of belonging to the institution.

Weak communication between faculty was considered as the main lack for several interviewees who stressed the importance of sharing information and following students' progress as a team to improve dropout rates and place the right prevention strategies.

As for one of the main predictors of dropout, complaint resolution, the items reliability shows that the more complaints are solved, the more students are satisfied with most features of their studies, and the less they think of dropping out; however, unfortunately, the correlation shows that the more students are advanced in their studies, the less they witness complaints resolutions. Regarding this topic, interviewees spoke of several ways for students to present their requests or speak about their complaints. At UAB, students speak first to the professors than the tutor, coordinator, vice dean, dean, and rectorate in case the issue was never solved. In addition, they have class delegates, the students' council of each faculty, the meetings of the board of the faculty in which the students' representatives can participate and object, the "students' lawyer" or defender through the "Síndic de Greuges" or ombudsmen which is considered the most "abusive" way of complaining, and ability to submit public complaints through the registry to reach the dean immediately. As for the UB, the complaining structure seems a bit ambiguous, students usually can complain to teachers, coordinators, or vice deans with no specific set order; no other mechanisms were mentioned; however, in both universities, the complaints are

analyzed, and if justified and possible to be dealt with, they are fixed. Nonetheless, most of the students´ answers have shown a lack of satisfaction in the complaint resolution process, 41.2% considered it needs to be improved, 34.6% found it satisfactory, and 16.1% placed it as unacceptable.

In general, based on the surveys, institutional support in all its kinds; academic, administrative, personal, or logistic needs to be improved from the students´ perspective.

- **Instructional Support**

Regarding the teacher performance, the percentage of students who thought it was satisfactory was kind of equal to those who thought it needed improvements. However, as the interviewees explained, the "General Directorate of Universities of the Autonomous Community of Catalonia", selects the teachers depending on the number needed and assigns the subjects based on contests or specific criteria. Such a process limits the universities´ choice and option when selecting new faculty members especially; however, universities always provide workshops and sessions to improve the teacher´s performance and share with them the students´ feedback to make necessary improvements. As this study targets public universities, the improvement of professors is not required by the university but depends on the professor's professionalism.

As for workshops offered, they are not mandatory for any of the university teachers as their teachers choose what is relevant for their development.

The exigence of continuous learning programs and ongoing improvement activities cannot be applicable in public universities due to the freedom of choice given to

teachers in the public sector and the incapability of the faculty to demand from professors to cope with changes and improve their work. Such a limited ability explains the poor quality of some classes given by specific teachers when compared to others.

Tackling instructional support, although not significant when compared to others, has proven to be individually significant in its relation to dropout thoughts. This result ties well with previous studies wherein institutional support including professors´ performance, interaction with students, the use of advanced support study materials, and continuous feedback usually decrease the students´ dropout thoughts as proven by the literature (European Commission, 2015).

- **Financial Support**

Financial support is ranked 4th regarding item reliability and its effect on dropout. However, most interviewees have considered it as the main reason why students drop from their studies.

Although the economic situation of students affects their decision of whether to drop out and according to the survey, 64.9% of them already have a part-time job which is also reflected in the division of schedules in the document analysis, the lack of financial support has been criticized by students but was ranked 4th among the dropout reason as this study believes, there is always a way to continue studying when one is satisfied and willing to graduate successfully.

About the financial support strategies to decrease the students´ financial burden, only 29.9% of students considered it satisfactory, 46.4% requested to make it better and 14.7% found it unacceptable similarly to the faculty members who expressed their disapproval with the government financial support strategies that are minimal and

given to specific students, and with the university funding options which do not allow any improvements in any field.

Although the interviewees considered the financial situation of the students as an important factor of dropout, through this study there was a non-significant correlation between the thoughts of dropout and financial support. According to the literature, the socio-economic background of students and their ability to balance financially between their studies, life, and work directly affect their decision of whether to drop out (Arendt, 2013, Maman et al., 2020). The study results were not in line with the previous studies as they did not show any significance between the thoughts of dropout and financial support when it comes to Education studies in the two Catalan public universities, though 64.9% of the students had a part-time job.

In addition to the previously mentioned factors that could lead to dropout, this study checks briefly extracurricular activities effect on dropout thought.

The interviewees believe that there is a responsibility for the university to engage students in social campus life which could strengthen their feeling of belonging and decrease dropout as mentioned in Hasbun et al. (2016).

The analysis carried out shows that the qualitative findings from the interviews support the quantitative findings. The interviews have shown that although faculty members seem satisfied, they are aware that any institutional or academic lack could strengthen the students´ thought of dropout.

The analysis also shows that faculty and students have a different ranking of the 5 main dropout factors, noting that both had the same options to put in order.

**TABLE 15.** *MAIN DROPOUT FACTORS.*

| Order | Faculty Perspective | Student Perspective | Quantitative Analysis Results |
|---|---|---|---|
| 1 | Financial situation | Curriculum deception | Program Satisfaction |
| 2 | The mismatch between expectations and content | The mismatch between expectations and content | Academic Performance |
| 3 | Poor Orientation | Poor Orientation | Institutional Support |
| 4 | Academic results | Financial Situation | Instructional Support |
| 5 | Personal and social reasons | Academic results | Financial Support |

Although the chronological order of dropout factors varies based on the perspective and position of the person expressing thoughts, the quantitative analysis validates the qualitative research findings which make the study considered as reliable. Program Satisfaction variable includes curriculum deception and mismatch between expectations and content, Academic Performance includes academic results, Institutional Support includes poor orientation and could include the lack of attention to personal and social reasons, and Financial Support includes financial situations. It is interesting to note that from the faculty perspective, the main reason for dropout is financial situational whereas according to students and the quantitative results, it is program satisfaction.

In sum, dropout antecedents are complicated and could be placed under different categories. To be able to prevent dropout in the faculties of Education at the two Catalan public universities, the faculties have to be attentive to the main reasons for dropout previously mentioned and to plan some general prevention strategies

accordingly, and then, once they work on their internal communication process, the faculties could start working on dealing with specific cases.

### 5.2.3 Prevention strategies

**What kind of strategies are implemented in Education faculties in Catalonia to follow up students during their studies and prevent dropout, and how can we ameliorate them?**

Based on the interviews, the faculties of Education have several activities to decrease indirectly dropout rates due to academic reasons as tutoring and mentorship, conferences and workshops, etc. However, these activities do not have as the main target to decrease dropout rates or prevent it from happening but to support students academically. Also, the two universities, in general, have some centers specialized in supporting students in need psychologically, academically relevant to language skills, or personally, but as the surveys showed, most of these centers are not recognized by students which entailed weakness in information sharing. On the state level. The study showed that there is no set plan or instruments or funding to support the universities to decrease dropout although the literature review showed that decreasing dropout rates was on the list of Spain for Europe 2020.

The main drawbacks that all interviewees mentioned and that the literature review also stressed is the lack of information at the university entrance level to know more about the students´ backgrounds and the lack of a method to follow up the students' trajectories while studying and the difficult access to any information relevant to students that might cause dropout without their approval due to the Data protection law.

Influenced by Acevedo´s model (2020), the study proposed a follow-up model for educational institutions based on the "Dimensions of Academic Dropout" wheel and the findings of the analysis of data. The model proposes some data collection and prevention strategies for higher education institutions in general and more specifically for the faculties of Education in the two public Catalan universities.

The model presented in figure 40 aims at allowing the institutions to link between dropout factors presented in the "Dimensions of  Academic Dropout" wheel and the relevant institutional strategies that would help to deal with these factors in the purpose of preventing dropout.

FIGURE 40. *"STUDENT SUPPORT" MODEL FOR HIGHER EDUCATION INSTITUTIONS (OWN)*
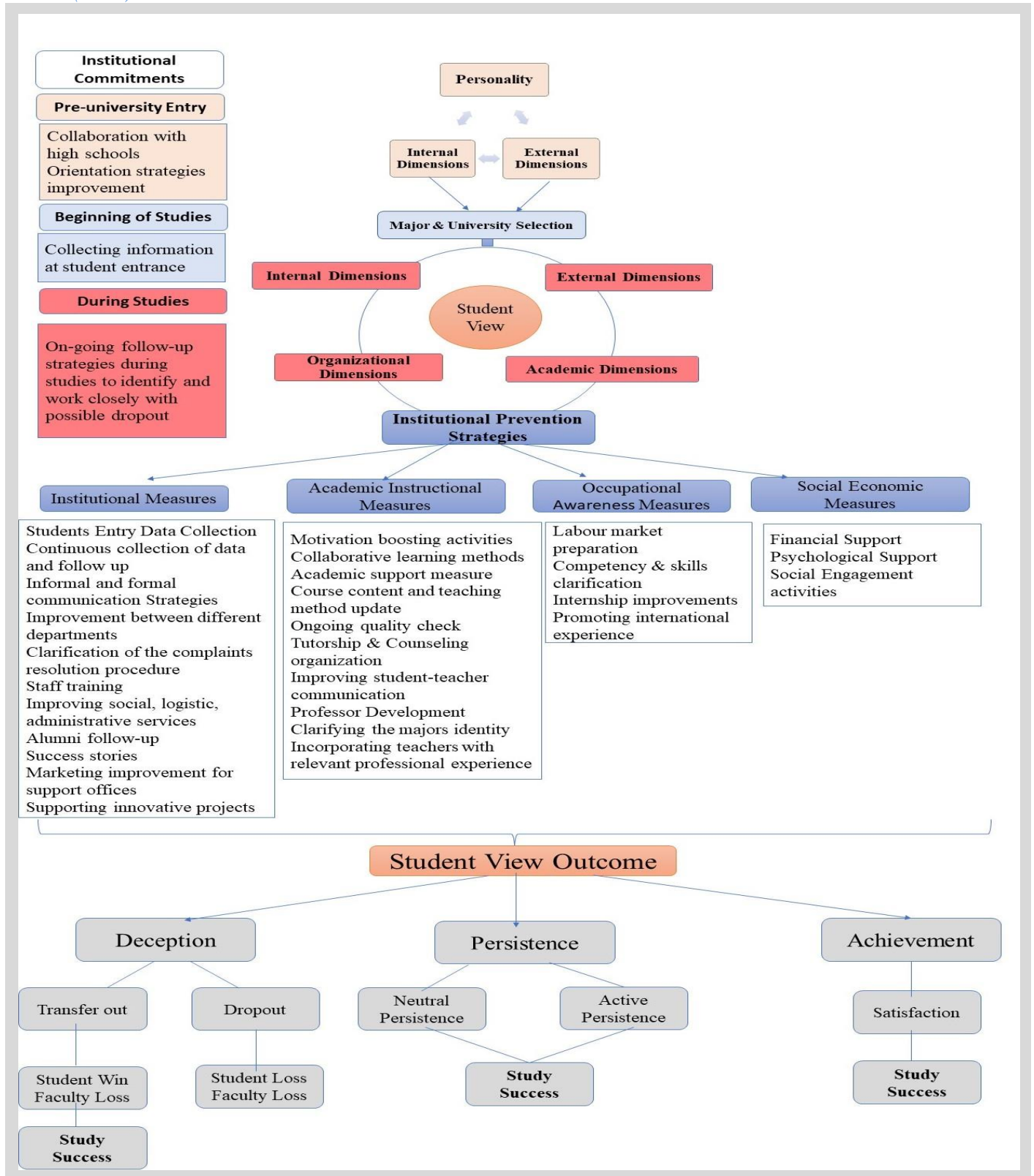
The implementation of the different strategies presented in the "Student Support" model would help to reduce the dropout risk by increasing student motivation to study and ameliorating student attitude and view towards his/her studies and institution thus decreasing dropout risks and increasing study success cases. The Dimensions included in the model refer to the "Dimensions of Academic Dropout" Wheel.

This model represents three different stages of the student´s trajectory.

Stage 1 reflects the pre-university entry phase through which the student is finishing high school and checking university options. At this stage, personality, internal and external dimensions have a direct effect on student´s choices. During this phase, and to make sure students receive the necessary information before enrolment, the educational institutions should improve their orientation strategies to inform more clearly about the majors offered, and they should also collaborate more closely with high schools and plan different common activities.

Once the student decides on enrolling in a university and selecting a major, stage 2 begins. Throughout this stage, it is recommended that universities start collecting information regarding the student´s academic and non-academic background. The study aims at designing a platform that would allow institutions to collect information without contradicting any of the student´s data protection laws. As such, institutions will have a short background on the students regarding some items from internal and external dimensions.

Stage 3 begins once the student´s journey at the institution starts, at this stage, all 4 dimensions will affect his/her view towards the institution. During this period, the same platform used to collect data will include ongoing surveys that would tackle different dropout factors indirectly. By doing so, the institution will be able to identify

some potential dropout cases.

It is expected to link the platform to the SPEET tool so that from grades collected, some groups of students at risk due to academic failure will appear and the courses with weak outcomes will be identified. Then through the ongoing method of surveys planned to be incorporated in the platform, information covering the different dimensions will be collected and students at risk will also be identified. It is important to mention that such a platform would allow the connection between the different dropout factors that could affect students´ decisions which would help in identifying students with dropout thoughts. Dropout usually takes place when one factor or more affects the student at the same time. These continuous surveys help to tackle all dropout factors and help in understanding the trajectory of students and providing them with the necessary support

Whether a high potential dropout rate appears or not, higher education institutions should be implementing prevention solutions to decrease their dropout rates and ensure student success throughout stage 3. The model shows different types of prevention solutions divided into 4 categories based on the literature review and including recommendations collected through the data analysis and relevant to dealing with dropout in Catalan public universities. These recommendations will be detailed through some new or updated practice examples in the Prevention Strategies booklet. Throughout this 3$^{rd}$ stage, a student´s view toward the institution and his/her studies will be shaped and the outcome might take 3 directions.

1$^{st}$ direction is Deception which could lead to transfer out or dropout. Although a university or a faculty might lose a student, it is highly recommended to advise the student on what to do next as the most important aim is to ensure student success even

if the university will lose some business.

2<sup>nd</sup> direction is Persistence which could be neutral or active. Neutral is when the student doesn´t want to create any headache even if not satisfied and his/her only aim is to graduate. Or active that is when the student complains with the aim of improving things and ensuring successful satisfied graduation.

3<sup>rd</sup> direction is Achievement, this takes place when the student is satisfied during the studies and success will surely be achieved at the end.

Implementing the prevention solutions during stage 3 will help in preventing dropout through mainly decreasing students´ problems and ensuring satisfaction or creating active persistence or redirecting students to transfer out rather than completely drop out. In all cases, after graduation or after dropping out, follow-up will take place through the same platform to make sure the institution is aware of its study success stories and its dropout cases so that lessons could be learned for improvements.

## 5.3 Conclusion

Looking back at the limitations that this study dealt with, below is a figure that demonstrates how these limitations we tackled.

1. The lack of a common method for calculating attrition (Deary et al., 2003; Glossop, 2001; Cook, 2010)

2. The difficulty in determining the reasons why a student drop out of a program (Deary et al., 2003; Dodge, Mitchell & Mensch, 2009; Glossop, 2001; Tinto, 1975)

3. The difficulty to access those who have already dropped out of a program (Glossop, 2001)

4. The weak inventories used to collect data from students (Deary et al., 2003; Glossop, 2001)

5. The inattention to possible relationships between factors that affect students' decision (Ascend Learning, 2012)

Dealing with limitations #2 & # 5

The "Dimensions of Academic Dropout" Wheel

Dealing with limitations #1, #3, & #4

The ¨Student Support¨ Model for Higher Education Institutions
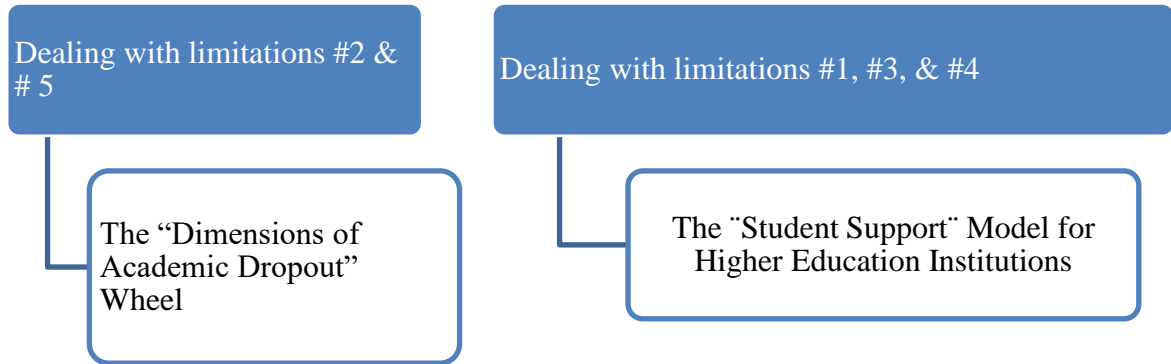
In conclusion, this research has offered several insights in different ways.

From one side, it managed to combine all dropout factors in the "Dimensions of Academic Dropout" wheel (Naaman, 2018). This model allowed solving two main limitations of previous studies; the difficulty in determining the reasons why a student drops out of a program (Tinto, 1975; Deary et al., 2003; Dodge et al., 2009), and the inattention to possible relationships between factors that affect students´ trajectory (Deary et al., 2003). By doing so, the ``Dimensions of Academic Dropout" wheel offered educational institutions the possibility to decrease dropout rates by observing the predictors that could be influenced by their measures.

From another side, the research study conducted in the faculties of Education of the two Catalan public universities has validated five of the hypotheses investigated. From the short review above, the key findings showed that the dropout antecedents are mainly program satisfaction and academic performance. Our findings on students´ trajectories have also shown that the more students are progressed in their studies at

the faculties of Education in these Catalan public universities the more the thoughts of dropout occur.

Besides, the study proposes another model called "Student Support" Model for Higher Education Institutions (own). This model projects three different stages of the student´s trajectory and link them to the "Dimensions of Academic Dropout" wheel allowing educational institutions to visualize the factors affecting students during each stage of their educational journey to help them implement the relevant prevention strategies in the purpose of decreasing dropout or redirecting it to transfer out.

The results demonstrate two main things. First, dropout predictors are numerous and distributed on different levels as per the ´Dimensions of Academic Dropout´ Wheel (Naaman, 2018). Several times, students experience a combination of multiple dropout factors from different dimensions which put the students at a greater risk of dropout. This study addresses the limitation in the literature by creating a model that projects all dropout factors and distributes them on different dimensions. This model allows a better view of the different factors that when combined, put the student at a higher dropout risk. This general projection allows the detection and application of the best strategies and prevention measures to decrease dropout. Second, the identification of the main dropout antecedents in the faculties of Education at two Catalan public universities allows the faculties to detect the strengths and weaknesses of their services and programs, thus selecting and applying the most suitable prevention strategies to prevent dropout.

## 5.4 Limitations, and Future Research

The findings of this study are limited by the fact that they only explore the predictors that could be manipulated by educational institutions. The antecedents of dropout are complex and several as projected in the "Dimensions of Dropout" wheel (Naaman, 2018). Secondly, the sample was limited to one faculty in both Catalan public universities. While this gives valuable knowledge, to begin with when implementing prevention strategies, generalizing from these findings requires caution. Thirdly, accessing classes, and conducting surveys were challenging on different levels especially due to the data protection law. Fourthly, following students through a longitudinal approach during their studies and investigating the choices taken by those who already dropped out was beyond the scope of the project. Finally, since information is collected only from students, there is a tendency to overestimate external factors as causes of dropout which affects the student perspective but also the Quantitative Analysis Results. To see the effects of organizational dimensions it would be much better to obtain objective data from the universities (with a larger number of universities in the sample) and relate them to their dropout rates.

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Future research should consider the "Dimensions of Academic Dropout" wheel (Naaman, 2018) to analyze in-depth factors as personality, and internal and external dimensions and investigate the antecedents of dropout that are more socio-demographic. Such analysis is recommended to continuously update the prevention strategies implemented based on at-risk students. Also, following up on previous droppers to learn from their experience to improve the educational services might prove important. Furthermore, future research could adopt a different view and examine some outcomes of interest that are other than dropout as transfer out. In the study, there was a minor observation of transfer out and turnover which are interested to be followed. The study showed that students think of transferring out to a different major or changing university when they are not satisfied with their program, their performance, and their professors' professional performance. However, for transfer out or turnover to be applicable, the statistics show that students are more likely to proceed with that when they are provided with the family support needed to take such a decision.

In addition, an implementation of the "Student Success" model to execute some prevention strategies and follow a group of students longitudinally to check the outcome would surely be of interest.

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# APPENDIX A

## SURVEY

"Análisis del abandono en educación superior e identificación de estrategias para la permanencia"

Estimado estudiante,

Mi nombre es Hind Naaman, soy estudiante de doctorado de segundo año en la UAB y estoy llevando a cabo la tesis titulada " Análisis del abandono en educación superior e identificación de estrategias para la permanencia".

El propósito de mi estudio es analizar el fenómeno del abandono y pensar en algunas estrategias innovadoras que disminuyan este mismo y ayuden a los estudiantes.

La realización de la tesis doctoral incluye una fase de recogida de datos sobre la situación de los estudios en el ámbito de la educación. Con este objetivo te quisiera pedir que respondas a una breve encuesta de unos 15 minutos. Tu opinión nos ayudará a mejorar los programas de la Facultad de Ciencias de la Educación y dar una atención personalizada a los estudiantes en situación de abandono.

**1. Universidad:**

○ UB

○ UAB

**2. Grado/Titulación:**

○ Educación Infantil

○ Educación Primaria

○ Educación Social

○ Pedagogía.

**3. Año en Curso:**

○ 1r

○ 2o

○ 3er

○ 4o

**4. ¿Cuándo has comenzado a estudiar en la UAB?**

○ Año 2010-2011

○ Año 2011- 2012

○ Año 2012-2013

○ Año 2013- 2014

○ Año 2014-2015

○ Año 2015-2016

○ Año 2016-2017

○ Año 2017-2018

**5. ¿Cuándo has comenzado tu especialización actual?**

○ Año 2010-2011

○ Año 2011- 2012

○ Año 2012-2013

○ Año 2013- 2014

○ Año 2014-2015

○ Año 2015-2016

○ Año 2016-2017

○ Año 2017-2018

**6. Edad**

○ Menos de 23 años

○ Entre 23 y 25 años

○ Más de 25 años

**7. Número de créditos aprobados durante los estudios:**

**8. Número de créditos matriculados en total desde que has empezado a estudiar:**

**9. Trabajo a tiempo parcial**

○ Sí

○ No

**10. Turno de Clases**

○ Mañana

○ Tarde

**11. Soy estudiante universitario de primera generación en mi familia**

○ Sí

○ No

○ Otro (especificar)

……………………………………………………………………………………………

**12. Recibí algún tipo de orientación en la escuela secundaria antes de escoger la carrera**

○ Sí

○ No

○ Otro (especificar)

…………………………………………………………………………………………

**13. Recibí la suficiente información antes de registrarme a la Carrera**

○ Sí

○ No

○ Otro (especificar)

…………………………………………………………………………………………

**14. Estoy satisfecho con el programa ofrecido por la facultad cumple con mis expectativas**

○ Inaceptable

○ Necesita mejorar

○ Satisfactorio

○ Excelente

○ Otro (especificar)

…………………………………………………………………………………………

**15. Estoy satisfecho con el contenido de los cursos**

○ Inaceptable

○ Necesita mejorar

○ Satisfactorio

○ Excelente

○ Otro (especificar)

…………………………………………………………………………………………

**16. Estoy satisfecho con el soporte administrativo ofrecido a los alumnos**

○ Inaceptable

○ Necesita mejorar

○ Satisfactorio

○ Excelente

○ Otro (especificar)

…………………………………………………………………………………………

**17. Considero los programas de la facultad actualizados**

○ Inaceptable

○ Necesita mejorar

○ Satisfactorio

○ Excelente

   ○ Otro (especificar)

…………………………………………………………………………………………

**18. Cómo evaluaría la docencia de los profesores**

   ○ Inaceptable

   ○ Necesita mejorar

   ○ Satisfactorio

   ○ Excelente

   ○ Otro (especificar)

…………………………………………………………………………………………

**19. La facultad ha respondido efectivamente a tus quejas académicas**

   ○ Inaceptable

   ○ Necesita mejorar

   ○ Satisfactorio

   ○ Excelente

   ○ Otro (especificar)

…………………………………………………………………………………………

**20. Hay comunicación de mensajes entre profesores y con los estudiantes**

   ○ Inaceptable

   ○ Necesita mejorar

   ○ Satisfactorio

   ○ Excelente

   ○ Otro (especificar)

…………………………………………………………………………………………

**21. ¿Ante dificultades académicas, la Facultad tiene mecanismos y procesos para ayudar a resolver las dudas?**

   ○ Inaceptable

   ○ Necesita mejorar

   ○ Satisfactorio

   ○ Excelente

   ○ Otro (especificar)

…………………………………………………………………………………………

**22. ¿Ante dificultades personales, la Facultad tiene mecanismos y procesos para ayudar a resolver las dudas?**

○ Inaceptable

○ Necesita mejorar

○ Satisfactorio

○ Excelente

○ Otro (especificar)

………………………………………………………………………………………………

**23. ¿Ante dificultades logísticas (alojamiento, transportación etc.), la Facultad tiene mecanismos y procesos para ayudar a resolver las dudas?**

○ Inaceptable

○ Necesita mejorar

○ Satisfactorio

○ Excelente

○ Otro (especificar)

………………………………………………………………………………………………

**24. ¿Cómo describiría el ambiente de estudio?**

○ Inaceptable

○ Necesita mejorar

○ Satisfactorio

○ Excelente

○ Otro (especificar)

………………………………………………………………………………………………

**25. ¿Cómo evaluaría el apoyo financiero (becas de estudio) ofrecido a los estudiantes por parte del estado?**

○ Inaceptable

○ Necesita mejorar

○ Satisfactorio

○ Excelente

○ Otro (especificar)

………………………………………………………………………………………………

**26. ¿Cómo evaluaría las becas de movilidad ofrecido a los estudiantes?**

○ Inaceptable

○ Necesita mejorar

○ Satisfactorio

○ Excelente

○ Otro (especificar)

………………………………………………………………………………………………

**27. Una vez finalizado los estudios, estaré bien preparado para el trabajo**

○ Inaceptable

○ Necesita mejorar

○ Satisfactorio

○ Excelente

○ Otro (especificar)

………………………………………………………………………………………………

**28. ¿Cómo consideraría los centros de practicum con los que colabora la facultad?**

○ Inaceptable

○ Necesita mejorar

○ Satisfactorio

○ Excelente

○ Otro (especificar)

………………………………………………………………………………………………

**29. ¿Fue satisfactoria mi experiencia de practicum?**

○ Inaceptable

○ Necesita mejorar

○ Satisfactorio

○ Excelente

○ Otro (especificar)

………………………………………………………………………………………………

**30. ¿Cómo evaluaría el trabajo de los tutores de universidad?**

○ Inaceptable

○ Necesita mejorar

○ Satisfactorio

○ Excelente

○ Otro (especificar)

………………………………………………………………………………………………

**31. ¿Cómo evaluaría el trabajo de los tutores de practicum?**

○ Inaceptable

○ Necesita mejorar

○ Satisfactorio

○ Excelente

○ Otro (especificar)

………………………………………………………………………………………………

**32. Mi esfuerzo personal para estudiar en casa fue …**

○ Inaceptable

○ Necesita mejorar

○ Satisfactorio

○ Excelente

¿Por qué? (Especificar)

………………………………………………………………………………………………
………….

**33. Considero que mi rendimiento académico es …**

○ Inaceptable

○ Necesita mejorar

○ Satisfactorio

○ Excelente

¿Por qué? (Especificar)

………………………………………………………………………………………………
………….

**34. Mi asistencia a las diferentes actividades extracurriculares organizadas por la universidad**

○ Inaceptable

○ Necesita mejorar

○ Satisfactorio

○ Excelente

○ Otro (especificar)

………………………………………………………………………………………………

**35. Considero que el apoyo de mis padres para llevar a cabo mis estudios?**

○ Inaceptable

○ Necesita mejorar

○ Satisfactorio

○ Excelente

○ Otro (especificar)

………………………………………………………………………………………

**36. ¿Alguna vez he pensado en abandonar?**

○ Si

○ No

¿Por qué?

………………………………………………………………………………………

**37. ¿Alguna vez he pensado en cambiar de carrera?**

○ Si

○ No

¿En caso que sí, porque y que te gustaría hacer?
¿En caso que NO, que es lo que te gusta más tu carrera?

………………………………………………………………………………………

**38. ¿Conoces algún tipo de programas ofrece la universidad para ayudar a los estudiantes? Selecciona del listado siguiente.**

○ PIUNE

○ Servicio de Psicología y Logopedia (SPL)

○ Centro de Autoaprendizaje de Lenguas

○ Deportistas profesionales

○ Servicio asistencial de salud

○ Servicios en red

○ Servicio de Empleabilidad

○ Trabajo en el extranjero

○ Otro (por favor comentar)

………………………………………………………………………………………

**39. ¿Porque piensas que los estudiantes abandonan o cambian de Carrera? Enumera las 4 más importantes.**

○ Problemas Financieros

○ Requisitos de Trabajo

○ Presión Familiar o Etnoreligioso

○ Decepción Curricular o de Carrera

○ Fracaso Académico

○ Incapacidad para adaptarse

○ Relación (estudiante – profesor) o (Estudiante – administración) débil.

○ Mala opción de carrera

○ Falta de confianza en uno mismo

○ Falta de preparación para niveles universitarios (Habilidades,nivel de idioma)

○ Actividad política en la Universidad

○ Falta de coincidencias entre las expectativas de los estudiantes y los objetivos de la carrera.

○ Otro (Comentar)

……………………………………………………………………………………………

**40. Creo que**

○ Completare mis estudios universitarios

○ Cambiare de Universidad

**41. ¿En caso de cambiar de Universidad, que escogerías?**

○ Universidad Privada en Catalunya

○ Otra Universidad Pública en Catalunya

○ Otra Universidad en España

○ Una Universidad en el extranjero

Escriba la Universidad en caso de tenerla en mente y especifique porque la escogería.

……………………………………………………………………………………………

**42. Piensa en un momento donde has tenido dudas sobre tus estudios, ¿Qué te motivo a quedarte?**

○ El contenido del programa

○ Tu amor por la enseñanza/ educación

○ Experiencias previas de posgrados

○ Los beneficios de un trabajo de docente

○ Incapacidad para ser aceptado en otra carrera

○ Situación financiera

○ Otro (especificar)

……………………………………………………………………………………………

**43. ¿Qué consideras que puede hacer la universidad para mejorar su atención a los estudiantes que se encuentran en alguna situación de vulnerabilidad?**

……………………………………………………………………………………………

**44. ¿Conoces algún tipo de programas ofrece la facultad para ayudar a los estudiantes? Selecciona del listado siguiente.**

○ Cursos remediales

○ Tutorados

○ Programas de verano

○ Cursos de idiomas

○ Asesoramiento y tutoría

○ Grupos de apoyo

○ Otro (por favor comentar)

……………………………………………………………………………………………

**45. ¿Conoces algún compañero que ha abandonado o piensa en abandonar los estudios? ¿Por qué crees que tomó o tomará esta decisión?**

……………………………………………………………………………………………

**46. ¿Te gustaría añadir algo?**

……………………………………………………………………………………………

**47. Si deseas recibir las resultados del estudio, por favor deje tu correo electrónico.**

……………………………………………………………………………………………

**48. Si deseas colaborar en las fases futuras de esta investigación, por favor deje su nombre y correo electrónico y nos pondremos en contacto contigo.**

……………………………………………………………………………………………

*Muchas gracias por tu colaboración!*