Student’s Personal Coping with University Studies while Facing Drop Out

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ABSTRACT

Drop out is a phenomenon imparted of complexity, factorial polysynthesis, and diversity of consequences unfortunately negative in nature. Thus, a thorough comprehension and analysis of the factors affecting drop out and the tendency to it, are crucial. In this paper, the latter is examined in an effort to enlighten the causes behind the manifestation of drop out so as appropriate interventions are applied. In this respect, the present work focused on those factors that exert direct or indirect influence of positive or negative nature on the way students cope with university studies, overcome obstacles and value the university experience. The research was conducted at the University of Patras on a student sample with 696 valid questionnaires. The findings indicate that the principal factors behind the tendency to drop out are the students’ frustration, the absence from their obligatory academic duties, and dissatisfaction with their cognitive subject. On the contrary, the primary factors decreasing the students’ tendency to drop out are the sense of effectiveness in their studies, the perception of gaining valuable things from studying at university, and the creation of good relationships with their fellow students and university teachers.

Keywords: drop out, higher education studies, tendency to drop out, university.

I. INTRODUCTION

While it exists continuous pressure of student’s obligations and the pursuit of accomplishing the degree, it comes a wide range of emotional and social changes to complete the “picture” of student life (Brooks & DuBois, 1995; Pancer et al., 2000; Perry et al., 2001). Every area of student’s life is thus affected, requiring academic, social, and psychological adjustments to the new standards (Robotham & Julian, 2006).

It is crucial to investigate what happens when an imbalance in this adjustment process occurs. At the same time, the gap in this imbalance is a challenge for universities. The student’s permanent abandonment of university or somewhat better the transfer to another (Tinto, 1993), constitutes a potentially unfruitful result. In particular, the “institutional departure” expresses the student’s transfer from one higher education institution to another while the departure from the “system” (system departure) indicates the definite abandonment of higher education (Tinto, 1993; Ulriksen et al., 2010).

Drop out has unfavorable consequences for the student, the university, and the society as a whole. Specifically, in regard to the student, it constitutes a personal failure while under the social prism, the problem concerns families and also the relationship of the individual with society. Approached from a political perspective, it calls into question some policies to extend access to higher education, while from an economic scope, it implies wasting resources on an individual, family, and collective basis; this latter in terms of public funding (Stamelos et al., 2021; Stamelos & Patvandi, 2015).

Consequently, the problem of student drop out is crucial for higher education (Roso-Bas et al., 2016; Tinto, 2006, 2017) setting the “bar” of effective and in-time response, strategically high (Alban & Mauricio, 2019; Hillmert et al., 2017; Mujica et al., 2019).

Meanwhile, the research on drop out focuses on one factor’s effect or the interaction of more (Astin, 1975; Austin et al., 2005; Kehm et al., 2019; McKenzie & Schweitzer, 2001; Pike & Sause, 2002; Roso-Bas et al., 2016; Van Bragt et al., 2007, 2011; Van der Hulst & Jansen, 2002).

Along with that, constructs related to drop out such as burnout, emotional intelligence, and engagement, are further examined (Astin, 1975; Kehm et al., 2019; Van Bragt et al., 2007, 2011).

Meanwhile, the tendency to drop out is understood as the estimated probability of suspension of studies, either in the form of a change of cognitive subject or of a permanent withdrawal from the university (Bean, 1982). Indeed, the student’s tendency to drop out is an early warning sign of a
real drop out and this connection is emerging steadily (A. F. Cabrera et al., 1993; Respondek et al., 2017).

Regarding the above, the critical approach towards the students’ tendency to drop out and the thorough examination of the factors affecting it, is indeed of significance.

In the present work, the tendency to drop out from university studies is examined towards revealing the students’ “profile” and the causes accordingly, that due to their nature can be found throughout the paper under the term “personal” factor reflecting the way the students experience, evaluate and confront main aspects of the university life.

In particular, the focus is placed on how students encounter their studies, assess their personal strengths and weaknesses, organize their program, evaluate, and perceive their role, and manage their relationships with their fellow students and university teachers. In this direction, students’ way of coping with their university life and academic studies is analyzed under the scope to enlighten further the factors related to students’ tendency to drop out.

II. THEORETICAL BACKGROUND

From the very beginning of the formal education system’s establishment, drop out has been a critical concern for universities (Aljohani, 2016; Habley et al., 2012; Seidman, 2005; Tinto, 1993). Nevertheless, the theoretical models for the systematic study of the phenomenon were not developed until the early 1970s (Aljohani, 2016; Berger et al., 2012).

In the case of Greece, most drop out research focuses on two key “paths”: before admission to higher education and after graduation (Κυπριανός & Κονιόρδος, 2003). The study itself is an intermediate period that intervenes between the two above, indeed of special significance for life (Κυπριανός & Κονιόρδος, 2003; Σταμέλος, 2016).

The problem of drop outs is characterized by a high degree of complexity. This complexity is also reflected in the definitions of the concept, with the central ones documenting a transfer to another university or school (Aina, 2013; Casanova et al., 2018; Heublein, 2014) or the permanent drop out (Casanova et al., 2018; Gury, 2011).

The above complexity is further enhanced considering that drop out is neither a short-term and impulsive decision nor a single factor’s influence result. On the contrary, it is a process of various factors’ cumulative influence initiating the “departure” from studies (Heublein, 2014).

The first year of studies is the risk period as drop out occurs mostly then (Belloc et al., 2011; Bernardo et al., 2016; Castaño et al., 2004; Willcoxson, 2010). The regular attendance of freshmen facilitates the adaptation and development of their skills so as to harmonize with the requirements of the curriculum (Bernardo et al., 2016; Sabiote & Torres, 2009).

In addition, the importance of students’ motivation is highlighted in order to create a favorable perception of the educational quality and to upgrade the cognitive outcomes’ level (Duque et al., 2013). Students’ commitment to their studies and the consequential ability to meet their academic obligations are interpretive variables of their academic performance (Azevedo et al., 2010; Bernardo et al., 2016; Broadbent & Poon, 2015), related directly to the decision to leave or stay in university (Arco-Tirado et al., 2011; Bernardo et al., 2016).

How the student copes with his/her studies are an issue of significance towards this decision as there are factors that complicate, hinder, or even frustrate the purpose of the degree accomplishment. Typically, the lack of student satisfaction (Kadar et al., 2018; Sneyers & De Witte, 2017; Suhre et al., 2007) is crucial: a high level of satisfaction is related to a weak tendency to drop out (Duque, 2011), while strong persistence in studies (Lee et al., 2000).

Drop out is encouraged by additional factors such as student’s negative self-esteem, anxiety about the academic performance, interpersonal problems, time inefficiency, compulsory course attendance, assignments, and financial resources inadequacy, leading to stress and even burnout (Lin & Huang, 2014; Ribeiro et al., 2018; Salanova et al., 2010).

New demands and growing academic pressure are likely to elicit a patchwork of emotions that may act on students' academic success (Respondek et al., 2017), while the need for feedback on student academic life satisfaction is intensively noted (Douglas et al., 2006).

When satisfaction with the student life has a positive sign then drop out weakens. Indeed, the problems caused by the student’s academic and personal life trigger the tendency to drop out (Stamelos et al., 2021).

Of particular interest is the shift of students' interaction with their teachers from the social system to the academic one, under the view that academic integration is not simply identified with good performance but also with the interaction with teachers. However, the two systems that are the academic and the social, are considered separate but interconnected (Tinto, 1993; Ulriksen et al., 2010). In fact, according to Pierre Bourdieu (1984, 1986), we bring with us a series of moods when we engage in social contacts and these lead to how we interpret and make sense of what we experience (Bourdieu, 1984; Bourdieu & Richardson, 1986; Ulriksen et al., 2010).

Accordingly, regular attendance facilitates social interactions and strengthens the links between students, faculty, and the rest of the university staff (Bernardo et al., 2016; Gilardi & Guglielmetti, 2011; McPartland & Jordan, 2001; Willcoxson, 2010). At this point, the concept of “relatedness” is recalled, which represents the student’s need to feel connected to fellow students and to experience friendships (Sulea et al., 2015).

Indeed, according to Tinto (1993), the central issue in dropping out of studies is the student’s experience within the university based on the academic and social adjustment (Tinto, 1993, 1997). The irregular attendance of the courses and the absence constitute indeed risk factors for drop out (Magen-Nagar & Shachar, 2017; Prevatt & Kelly, 2003).

The quality of education is related to students' perceptions of their teachers’ ability, the way they make the lessons interesting, and the structure of the curriculum (Duque et al., 2013).

Meanwhile, the university learning tactics are strongly connected with academic performance (Antoni, 2003; Bernardo et al., 2016; L. Cabrera et al., 2006), while the wrong subject choice is related to the students’ withdrawal from their studies (R. Davies & Elias, 2003; Yorke, 1999, 2000; Zajić & Komendant-Brodowska, 2019).
Overall, the way students perceive their learning outcomes, the total university experience, and learning attitudes exert a strong influence on student’ satisfaction linked to the tendency to drop out (Duque, 2011).

A reasonable question that arises is whether the problem is related to a specific “category” of students with common characteristics “prone” to drop out. Based on the research by Stamelos (2021) different groups of students are formed at university, some of which are thinking of leaving their studies, regardless of their different backgrounds and motivations (Stamelos et al., 2021).

The influence of the various factors on drop out along with their diverse causal backgrounds verify both the theoretical and practical complexity of the problem. Nevertheless, according to Bernardo et al. (2016), the drop out problem is illuminated via the support of models developed and interpretive variables and factors analyzed. In regard to the latter, certain are not related at least directly to the control of the university, i.e., the student’s economic and social status, the so-called background variables. Still, both the student and the university need to adapt socially and academically, toward the completion of the degree (Bernardo et al., 2016).

The various theoretical models examine the influence of economic factors on drop out (Bernardo et al., 2016; Donoso & Schiefelbein, 2007; Jensen, 1981), psychological characteristics of students who drop out (Belloc et al., 2011; Bernardo et al., 2016; Fisher & Ajzen, 1977), sociological variables (Bernardo et al., 2016; Pincus, 1980), the role of the university (Kamins, 1971) and the interactions developed within it (Bernardo et al., 2016; Tinto, 1975). However, the research points out a gap in the differentiation of drop out’s interpretive variables, necessary if we take into consideration the different types of drop outs (Aparicio-Chueca et al., 2021).

Drop out in higher education is an issue of high value for both researchers and policymakers; once the exact causes have been identified, the formulation of solutions is the ultimate goal (Aljohani, 2016). In this sense, it would be beneficial when educational organizations intervene via the implementation of targeted strategies on social and economic axes as well as on matters of personal coping with the studies; this in respect to both direct and indirect influences these exert on drop out. The accomplishment of the present work’s research purpose illuminates the causal spectrum behind the students’ tendency to drop out, with a particular focus on students’ personal coping with their studies (personal axis).

Towards this goal, the intercorrelations of the latter with the academic, social, and institutional axes are mapped in order to capture the diversity of the effects of the tendency to drop out.

Therefore, in the present work, the composition of the drop out rate is structured mainly by the personal axis supplemented by the academic, institutional, social, and economic axes (Androulakis et al., 2020; 2021). The investigation and configuration of the above correlations contribute to a further understanding of the pathway leading to drop out via a particular focus on “how” the student deals with obstacles met during the university studies, in respect to their academic, social, economic, and institutional nature.

As a result of the above reasoning, the following research questions are configured:

1) What is the hierarchical sequence behind the tendency to drop out in regard to students’ personal axis?
2) What is the hierarchical sequence behind the student's tendency to drop out in regard to the academic and the institutional axis?
3) What is the hierarchical sequence behind the tendency to drop out in regard to students’ economic axis?
4) What is the hierarchical sequence behind the student's tendency to drop out in regard to the social axis?

III. Methodology

The population of the present work is representative of the Greek geographical distribution consisting of students at the University of Patras that during the research period of May 2019 included 24 Departments belonging to 5 Faculties, with more than 18000 enrolled students.

The questionnaire was answered by 954 students, and after the reliability and validity checks, 696 valid questionnaires emerged. The research was conducted under the auspices of the Laboratory of Management Information Systems and Business Intelligence at the Department of Business Administration of the University of Patras.

The drop out rate adopted in this paper was based on Diaz et al. (2016) categorization and Alban & Mauricio (2019), with variables that the literature links to drop out (Alban & Mauricio, 2019; Díaz & De León, 2016). The use of the above variables can be applied to questionnaires investigating the tendency to drop out by certain enrolled students since according to the literature these variables are predictors of student drop out (Duque et al., 2013).

Therefore, the drop out rate consists of 69 elements divided into five-factor axes that are personal, academic, economic, social, and institutional (Androulakis et al., 2020; 2021). The personal axis where the present research focuses consists of 27 items of which 12 were inverted. In addition, all aggregate indicators were calibrated using the item response theory, towards the achievement of the scales’ uniformity (Zanon et al., 2016).

For the calculation of the drop out and each subfactor index, the meaning of the items of each category was applied. All indices were normalized. In regard to the reliability of data, Cronbach’s alpha is 0.88 for the drop out, 0.80 for the personal factor, 0.76 for the academic, 0.70 for the institutional, 0.72 for the social and 0.87 for the economic factor (Androulakis et al., 2020).

The assessment of the examined factors through self-assessment by the student could be considered a limitation of the research and therefore could be supplemented with more objective measurement tools (Rupp & Zumbo, 2004). However, there is also the approach that the subjective ways of measuring are safe predictors of performance and behavioral intentions, especially in the educational context (Duque, 2011; Lizzio et al., 2002).

IV. Numerical Results

The statistical package R (R Core Team, 2022) was used for data processing, psych and summary tools libraries were used for multivariate analysis (Comtois, 2022; Revelle, 2021), while the reader, ggplot2, and knitr libraries were used.
to display the data (Wickham, Chang, et al., 2022; Wickham, Hester, et al., 2022; Xie, 2022). For the hierarchical regression trees, the rpart library was adopted (Milborrow, 2022; Therneau et al., 2018) and for clustering the mclust library (Scrucca et al., 2016).

The analysis of the personal factor is based on the following:

1) The effect of the personal factor on the tendency to drop out along with the intercorrelations of its items is analyzed. Hierarchical trees were applied in order to map both the factors that increase as well as decrease the tendency to drop out.

2) The effect exerted by the rest factors that apart the drop out index separately that is the academic, the economic, the social, and the institutional items in order to capture the indirect influences that they exert via the personal factor on the tendency to drop out.

The effect of the personal factor items on the tendency to drop out is analyzed in Fig. 1. The variables appeared to have positive impact on drop out. Therefore, in Fig. 1 it is observed:

- The third crucial factor in the direction of increasing the tendency to drop out is the lack of student dedication to the Department where his/her studies are contacted (Studies Dedication). On the contrary, the student’s effectiveness in facing the problems in the context of his/her studies (Facing Studying Probs) decreases the frustration and the tendency to drop out.

In the hierarchical tree the right direction expresses factors that increase the tendency to drop out, while the left direction indicates pathways to decrease the tendency on drop out. Therefore, in Fig. 1 it is observed:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frustration</td>
<td>I feel frustrated with my studies.</td>
<td>29.84</td>
</tr>
<tr>
<td>Less interest in studies</td>
<td>I have been less interested in my studies since my studies began.</td>
<td>9.61</td>
</tr>
<tr>
<td>Doubt</td>
<td>I doubt the importance of my studies.</td>
<td>9.17</td>
</tr>
<tr>
<td>Drop out thought</td>
<td>I have been thinking about giving up my studies because I feel that my strengths are running out.</td>
<td>8.59</td>
</tr>
<tr>
<td>Mental exhaustion</td>
<td>I feel mentally exhausted with my studies.</td>
<td>7.88</td>
</tr>
<tr>
<td>Emotional drainage</td>
<td>I feel emotionally drained from my studies.</td>
<td>7.41</td>
</tr>
<tr>
<td>r. Notes repetition</td>
<td>How often do you repeat notes for the next lecture?</td>
<td>7.29</td>
</tr>
<tr>
<td>r. Facing studying probs</td>
<td>I deal with my studies problems effectively.</td>
<td>5.32</td>
</tr>
<tr>
<td>r. Studies dedication</td>
<td>The university department I attend deserves my dedication.</td>
<td>3.99</td>
</tr>
<tr>
<td>r. Remarkable results</td>
<td>I feel that I have gained a lot of remarkable things during my studies.</td>
<td>2.06</td>
</tr>
</tbody>
</table>

In Table 1 clustering was applied for the variables’ importance (Scrucca et al., 2016). Two groups of factors are formulated: in the first, the factors with values from 2.06% to 29.84% and in the second, the factors with values from 2.06% to 29.84%...

Fig. 1. Hierarchical tree of influence of the factors that make up the personal factor in drop out.
up to 29%, and in the second, the factors with weaker importance, less than 1.33%. Comparing the order of factors’ importance values in Table I with the factors that appeared in the hierarchical tree of Fig. 1, it emerged that there exist factors showing great importance which do not appear though in the hierarchical tree.

These factors are the reduced interest in studies, doubts about the importance of the studies, thoughts of drop out, and mental exhaustion. The reason for this is that the most important factor “frustration,” is strongly correlated with the above factors and therefore its effect automatically leads them to high values. Therefore, these factors derive from the existence of frustration and do not operate autonomously in order to increase the tendency to drop out.

In Fig. 2 is illustrated the hierarchical tree of the academic factors’ effect on the personal axis. It is observed that:

1) The most important factor affecting the personal factor is the student’s absence from academic duties (Absenteeism from University).

2) The second significant factor is the lack of students’ satisfaction with the level of studies (Study Level Satisfaction) that negatively influences the personal factor, while the student’s satisfaction with the subject of study (Subject Study Satisfaction) works positively on that.

3) In the third important level of influence on the personal factor can be found the student’s attendance in the classroom without having first completed the reading or the assignments (Incomplete Preparation) which works negatively on the personal factor. Simultaneously, the clarity of the objectives and requirements of the courses (Clarity Goals) can be found at the same level working though positively to the personal factor.

![Hierarchical Tree](Image)

In Fig. 2. Hierarchical tree of the influence of the academic factors on the personal axis.

In Table II the factors that constitute the academic axis appear in descending order of importance in terms of their effect on the personal factor. It is observed that five groups of factors are created where in the first one the most important factors that appear in the hierarchical tree of Fig. 2 are categorized.

Fig. 3 illustrates the hierarchical tree of the economic axis’ effect on the personal factor:

1) The most important factor of influence is the student’s satisfaction with basic needs (Needs Basic).

2) The second most important factor exerting negative influence is the lack of satisfaction with the needs for education and training (Needs Education), while the satisfaction of entertainment needs (Needs Entertainment) works positively on personal factor.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absenteeism from University</td>
<td>I am often absent from my duties at university</td>
<td>28.20</td>
</tr>
<tr>
<td>r. Subject study satisfaction</td>
<td>Are you satisfied with the subject of your studies?</td>
<td>21.68</td>
</tr>
<tr>
<td>r. Clarity goals</td>
<td>During the academic year, to what extent did your professors clearly explain the objectives and requirements of the courses?</td>
<td>11.58</td>
</tr>
<tr>
<td>r. Study level satisfaction</td>
<td>What is the degree of your satisfaction with the level of your studies?</td>
<td>10.28</td>
</tr>
<tr>
<td>Incomplete preparation</td>
<td>During the current academic year, how often did you come to class without completing your reading or assignments?</td>
<td>7.63</td>
</tr>
<tr>
<td>r. Satisfaction dept educ. level</td>
<td>What is your degree of satisfaction with the level of study offered by your department</td>
<td>4.59</td>
</tr>
<tr>
<td>Semester absenteeism</td>
<td>How many times have you been absent from class so far this semester?</td>
<td>4.48</td>
</tr>
<tr>
<td>r. Knowledge solving real problems</td>
<td>To what extent has your university experience contributed to your knowledge skills and personal development in solving complex real-world problems?</td>
<td>4.43</td>
</tr>
<tr>
<td>r. Fair evaluation</td>
<td>My professors’ judgment is fair</td>
<td>1.54</td>
</tr>
<tr>
<td>r. Workload increase</td>
<td>The workload has increased.</td>
<td>1.32</td>
</tr>
<tr>
<td>r. Reward from tutors</td>
<td>My teachers reward my achievements and efforts</td>
<td>0.90</td>
</tr>
<tr>
<td>r. Study intensification</td>
<td>I work intensively to meet my student duties.</td>
<td>0.82</td>
</tr>
<tr>
<td>r. Grade average</td>
<td>What is the average grade point average of the courses you have taken so far?</td>
<td>0.82</td>
</tr>
<tr>
<td>r. Teaching staff level satisfaction</td>
<td>How satisfied are you with the work of the teaching staff and their contribution to the completion of your studies?</td>
<td>0.53</td>
</tr>
<tr>
<td>Attempt Univ. entrance</td>
<td>With what effort did you succeed in your introduction?</td>
<td>0.36</td>
</tr>
<tr>
<td>Univ. school preference order</td>
<td>In what order of preference was the school you attend?</td>
<td>0.29</td>
</tr>
<tr>
<td>r. Tutor feedback completed</td>
<td>During the academic year to what extent did your professors provide feedback details on tests or assignments completed?</td>
<td>0.23</td>
</tr>
<tr>
<td>r. Tutor feedback in progress</td>
<td>During the current academic year, to what extent did your trainers give feedback on a project or work in progress?</td>
<td>0.23</td>
</tr>
<tr>
<td>r. Success course percentage</td>
<td>What is the percentage of courses you have passed up to now compared to the courses you had to take in the semester you are in?</td>
<td>0.10</td>
</tr>
</tbody>
</table>

In Table III the factors that constitute the economic axis appear in descending order of importance in terms of the impact on the personal axis. It can be observed that four

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groups of factors are created where in the first two, the three most important factors are categorized, and also appear in the hierarchical tree of Fig. 3.

### TABLE III: THE IMPORTANCE OF THE FACTORS THAT STRUCTURE THE ECONOMIC AXIS EXERTING INFLUENCE ON THE PERSONAL AXIS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>r. Needs basic</td>
<td>Living conditions to meet basic needs.</td>
<td>25.73</td>
</tr>
<tr>
<td>r. Needs education</td>
<td>Living conditions to meet the needs for education and training.</td>
<td>21.19</td>
</tr>
<tr>
<td>r. Needs entertainment</td>
<td>Living conditions to meet the needs for entertainment.</td>
<td>20.21</td>
</tr>
<tr>
<td>r. Needs housing</td>
<td>Living conditions to satisfy housing needs.</td>
<td>17.76</td>
</tr>
<tr>
<td>r. Needs cultural</td>
<td>Living conditions to meet the needs for cultural events.</td>
<td>15.11</td>
</tr>
</tbody>
</table>

Fig. 3. Hierarchical tree of the influence of the economic axis factors on the personal axis.

Fig. 4 illustrates the hierarchical tree of the social axis’ effect on the personal factor:

1) The most important factor is the existence of good relations between the student and fellow students (Relationship Fellow). It exerts when exists a positive influence on the personal factor.

2) The second important factor acting positively to the personal factor is the existence of good relations between the student and the teachers (Relationship Tutor).

3) The third important factor is the cooperation of the student with fellow students in the preparation for the exams or for a test (Cooperation Exams Preparation) that exerts a positive influence on the personal factor.

In Table IV the factors that structure the social axis appear in descending order of importance affecting the personal axis. It is observed that four groups of factors are created where in the first two, the three most important factors are categorized, which are those appearing in the hierarchical tree of Fig. 4.

### TABLE IV: THE IMPORTANCE OF THE FACTORS THAT STRUCTURE THE SOCIAL AXIS EXERTING INFLUENCE ON THE PERSONAL AXIS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>r. Relationship fellow</td>
<td>I have a good relationship with my fellow peers</td>
<td>69.36</td>
</tr>
<tr>
<td>r. Relationship tutor</td>
<td>I have a good relationship with my professors.</td>
<td>25.13</td>
</tr>
<tr>
<td>r. Cooperation exams preparation</td>
<td>How often have you worked with a fellow student to prepare for exams or a test?</td>
<td>3.85</td>
</tr>
<tr>
<td>r. Career plans discussion with tutor</td>
<td>During the current academic year, how often did you discuss your career plans with a faculty member?</td>
<td>1.67</td>
</tr>
</tbody>
</table>

Fig. 5 illustrates the hierarchical tree of the institutional axis’ effect on the personal factor:

1) The most important factor of influence is the contribution of the university to the academic success of the students (University Support for Success).

2) The second most important factor is the lack of satisfaction with the study environment (Learning Infrastructure Satisfaction) that exerts a negative influence on personal factor while the satisfaction with the equipment in the student environment (Learning Equipment Satisfaction) operates positively.

In Table V the factors that structure the social axis appear in descending order of importance in terms of their effect on the personal axis. It is observed that six groups of factors are created where in the first two, the three most important factors are categorized, which are the ones that appear in the hierarchical tree of Fig. 5.

### TABLE V: THE IMPORTANCE OF THE FACTORS THAT STRUCTURE THE INSTITUTIONAL AXIS EXERTING INFLUENCE ON THE PERSONAL AXIS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>r. University support for success</td>
<td>To what extent does the University provide assistance for students’ academic success?</td>
<td>35.88</td>
</tr>
<tr>
<td>r. Learning equipment satisfaction</td>
<td>The study environment - equipment - is satisfactory</td>
<td>16.17</td>
</tr>
<tr>
<td>r. Learning, infrastructure satisfaction</td>
<td>The study environment -building infrastructure facilities- is satisfactory</td>
<td>15.92</td>
</tr>
<tr>
<td>r. Univ. learning support</td>
<td>The study environment -building infrastructure facilities- is satisfactory</td>
<td>8.46</td>
</tr>
<tr>
<td>r. Function infrastructure satisfaction</td>
<td>How much satisfied you are with the entire operating infrastructure of your department?</td>
<td>8.28</td>
</tr>
<tr>
<td>r. Support for prosperity</td>
<td>To what extent does the University provide support for your overall well-being (recreation, health care, counseling, etc.)?</td>
<td>7.22</td>
</tr>
<tr>
<td>r. Univ. encouragement in campus events</td>
<td>To what extent does the University favors the participation in activities on campus (sports, art, etc.)?</td>
<td>5.85</td>
</tr>
<tr>
<td>r. Secretarial service satisfaction</td>
<td>To what extent are you satisfied with your departments’ secretarial services in relation to the service of the issues that concern you?</td>
<td>1.73</td>
</tr>
<tr>
<td>r. Bureaucracy</td>
<td>There is a lot of bureaucracy in my department</td>
<td>0.48</td>
</tr>
</tbody>
</table>
The complexity of drop out is addressed through the examination of different variables, phenomena, and factors and the categorization of the latter (Díaz & De León, 2016). Though, the answer to the question of how the different structures interact with each other in predicting student drop out needs further analysis (Bardach et al., 2019).

In the present research, the hierarchical sequence of the personal factor’s structural elements and their interactions towards the tendency to drop out were examined. That is, the personal way that the student copes with his/her academic affairs, perceives and interprets his/her studies, overcomes the obstacles, and utilizes the positive elements of the university experience, were configured. The analysis of the pathway of how the students treat university studies as a whole raises meaningful signals toward capturing the tendency to drop out.

Regarding the first Research Question concerning the influence of the personal axis on the tendency to drop out, the main findings can be summarized as follows:

1) The main elements of the personal factor that increase the tendency to drop out are:
   a) the student’s frustration,
   b) the irregular repetition of the student’s notes for the next lecture, and
   c) the reduced student’s commitment to the Department where his/her studies are contacted.

2) The main elements of the personal factor that reduce the tendency to drop out are:
   a) the student’s sense of effectiveness in his/her studies,
   b) the student’s feeling that he/she is gaining a lot of valuable things while studying,
   c) The interest in learning the course material, and
   d) The lack of pressure during the daily study.

In addition, considering the influence of the academic axis on how the student deals with academic issues, conclusions are drawn about the indirect effect on the personal axis. Therefore, in regard to the second Research Question regarding the influence of the academic and the institutional axis on the tendency to drop out, it emerged that the most critical factor exerting vital influence on the personal way the student treats university studies is his/her absence of the obligatory academic duties. This finding is in line with the literature according to which the student’s absenteeism from the university is closely intertwined with the intention to drop out and therefore the absence consists of an “omen” of drop out. Indeed, the importance of student participation in courses and assignments is constantly emphasized mainly via the mechanism of social and academic adjustment at university (Bernardo et al., 2016; Tinto, 1997). Student presence in lectures is approached as an emotional and pedagogical process (Hovdhaugen & Aamodt, 2009; Yorke & Longden, 2004), while strengthening the student’s stay at university (Berliner, 2005; Darling-Hammond & Youngs, 2002; Fenstermacher & Richardson, 2005; Joyce et al., 2003; Magen-Nagar & Shachar, 2017; Wayne & Youngs, 2003). In contrast, reduced lecture attendance (class attendance) is strongly associated with drop out (Bernardo et al., 2016).

A further finding of the present work is that students’ dissatisfaction with the level of studies increases the tendency to drop out. On the contrary, the student’s satisfaction with the subject of studies emerged to play a protective role against the tendency to drop out. This finding is in line with Georg (2009) research where the student’s weak commitment to the subject of studies constitutes the primary reason for not remaining in the studies’ context (Georg, 2009). In addition, according to the research of Duque et al. (2013) the wrong primary choice of the study subject is a principal reason in regard to the tendency to drop out, as this choice fails to meet expectations and academic motivations (Duque et al., 2013).

Remaining in the context of “mapping” the correlations between the academic issues and the way the student copes with his/her studies, the course attendance after completing the reading and the assignments, as well as the clarity of the course objectives and requirements emerged as significant factors. This is in line with the literature where it is documented that when students come to class unprepared for learning and without having completed their work, their intention to drop out increases. Accordingly, the research of Zając and Komendant-Brodowska (2019) demonstrated that insufficient course description is a critical factor that triggers students’ decision to drop out (Zając & Komendant-Brodowska, 2019).

An additional finding in the present research is that university support towards the student’s academic achievement plays a critical eliminating role in the drop out tendency. This is in accordance with the literature where it is indicated that student support services exert a significant influence in terms of both social and academic adjustment (Bernardo et al., 2016; Braxton et al., 2000).

In regard to the third Research Question of the present work concerning the influence of the economic axis on the tendency to drop out, it emerged that students’ lack of satisfaction with their basic living needs increases the tendency to drop out. This finding is in line with Bennett’s (2003) research where students’ financial difficulties have a strong impact on their decision to stay or drop out. In fact, in the case where the students had low grades or substantial financial problems, the characteristic of self-esteem played a critical role towards the tendency to drop out (Bennett, 2003).

Similarly, according to Davies (2000) and Martinez (2001) issues related to students’ financial difficulties have a greater impact on the “withdrawal” from studies compared to aspects of academic experience that belong mainly to control of the University (Bennett, 2003; P. Davies, 2000; Martinez, 2001).
In addition, in the present work emerged that the lack of students’ ability to meet their needs for education increases the tendency to drop out. On the contrary, the satisfaction of the student’s needs for entertainment plays a limiting role in the tendency to drop out of studies. This finding is in line with the approach that students enter into a process of comparing the financial costs of staying within their studies and the benefits deriving (Aljohani, 2016; Habley et al., 2012; Tinto, 1993). Indeed, as cited by Habley et al. (2012) the above expenses indirectly include the costs of time and energy that students devote to external obligations along with the requirements that exist within the educational context (Aljohani, 2016; Habley et al., 2012).

In terms of the fourth research question regarding the influence exerted by the social axis on students’ tendency to drop out, it arises that the lack of good relationships between the students and their fellow students increases the tendency to drop out. This finding is in accordance with the literature where the student’s relationship with his/her fellow students throughout the years at university is considered to be more important than the already existing friendships. Actually, they are perceived by the student as the most important source of support during particularly the first year of study (Holdsworth et al., 2018). Remaining in the same context, in the present research also emerged that students’ cooperation in preparing for exams or for a test weakens the tendency to drop out and encourages retention within the university.

This finding is supported by the importance of academic and social adjustment that incorporates effective personal learning strategies such as regularly reviewing lecture notes, preparing assignments, and collaborating with fellow students (Bennett, 2003). Moreover, the function of students in groups is significant because it strengthens their motivation and the development of positive academic experience translated into satisfaction, commitment, and enthusiasm, transmitted indeed to all team members (Bakker et al., 2006).

An additional finding of the present work is the importance of developing apart from their fellow students, good relationships with their professors as well, acting in turn protectively towards drop out, reminding of a retaining “net” within the educational framework. This is in line with the approach of the teacher’s role as crucial in terms of the quality of the teaching work, the encouragement of the student’s personal integration, and his/her expectations for improvement (Magen-Nagar & Shachar, 2017). Similarly, in the research by Bernardo et al. (2016), it is confirmed that positive relationships between students and teachers contribute positively to academic outcomes by encouraging their learning autonomy and clarifying what exactly is required of their student role (Backović et al., 2012).

The importance of good relationships between students with their teachers in the context of the desired completion of the degree is included in the theoretical models of Spady (1970, 1971) and Tinto (1975) where student’s interaction with teachers is a significant element of the studen’s social and academic integration in the educational organization (Spady, 1970, 1971; Tinto, 1975). Indeed, the interaction between students and teachers even outside the classroom can increase the student’s level of commitment to the educational organization, minimizing meanwhile the risk of dropping out (Aljohani, 2016; Pascarella, 1980).

VI. CONCLUSIONS AND FURTHER RESEARCH

The phenomenon of drop out is not simple; instead, it is dominated by theoretical and practical diversity (Casanova et al., 2018; Zając & Komendant-Brodowska, 2019). Therefore, a thorough understanding of the problem imposes the need to configure the “paths” leading to either student’s “departure” or “stay” at university (Casanova et al., 2018; Dias et al., 2011; Esteban García et al., 2016). Therefore, focus needs to be placed on the effects exerted by the diverse factors that push students in one direction or another, allowing in turn targeted interventions to occur toward eliminating the risk factors (Casanova et al., 2018).

In this respect, the present work focused on central factors that directly or indirectly influence positively or negatively the way the student copes with his/her university studies. This “mechanism” revealed testifies in turn, its impact on the tendency to drop out, strongly related to the final decision to stay or leave the university.

Therefore, the present work outlines that the main factors increasing the student’s tendency to drop out are the following: student’s frustration, absence from the obligatory academic duties, dissatisfaction with the subject and the level of studies, non-regular repetition of the notes for the next lecture and a reduced sense of commitment to the university department. On the contrary, the factors that emerged to decrease students’ tendency to drop out are the sense of effectiveness in the studies, the feeling that valuable things are gained from studying in university, the existence of good relationships with fellow students and university teachers, the interest in the material of the course and the lack of feeling pressure during the daily study.

The present research contributes to the theoretical understanding of the “mosaic” made up from various influences of various factors that significantly affect the way the student copes with the university studies, perceives them, overcomes obstacles, and values the university experience. The way of coping with the studies emerged as a significant factor towards the tendency to drop out; in the case of effective coping, the tendency to drop out weakens while in the opposite circumstance where the risk factors dominate the “safety net” that tends to retain the students in their studies, is eroded.

Accordingly, the practical interventions could consider the above effects on university drop out prioritizing the academic, social, economic, and institutional matters that exert influence of direct or indirect nature, on the way the students treat their studies, preventing thus the tendency to drop out. Therefore, the university regarding student retention could intervene in issues that at first glance appear directly unrelated to its competency.

To conclude, it is important further emphasis is placed on strategies to strengthen the mechanism students need in order to cope effectively with the various aspects of their studies and become part of a positive university experience. The ultimate goal is that students dismiss the thought of dropping out, a thought so closely linked to the actual drop out.

In future research, the tendency to drop out could be compared with the actual drop out rate via a mixed research methodology, utilizing a sample of students who have already dropped out.

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