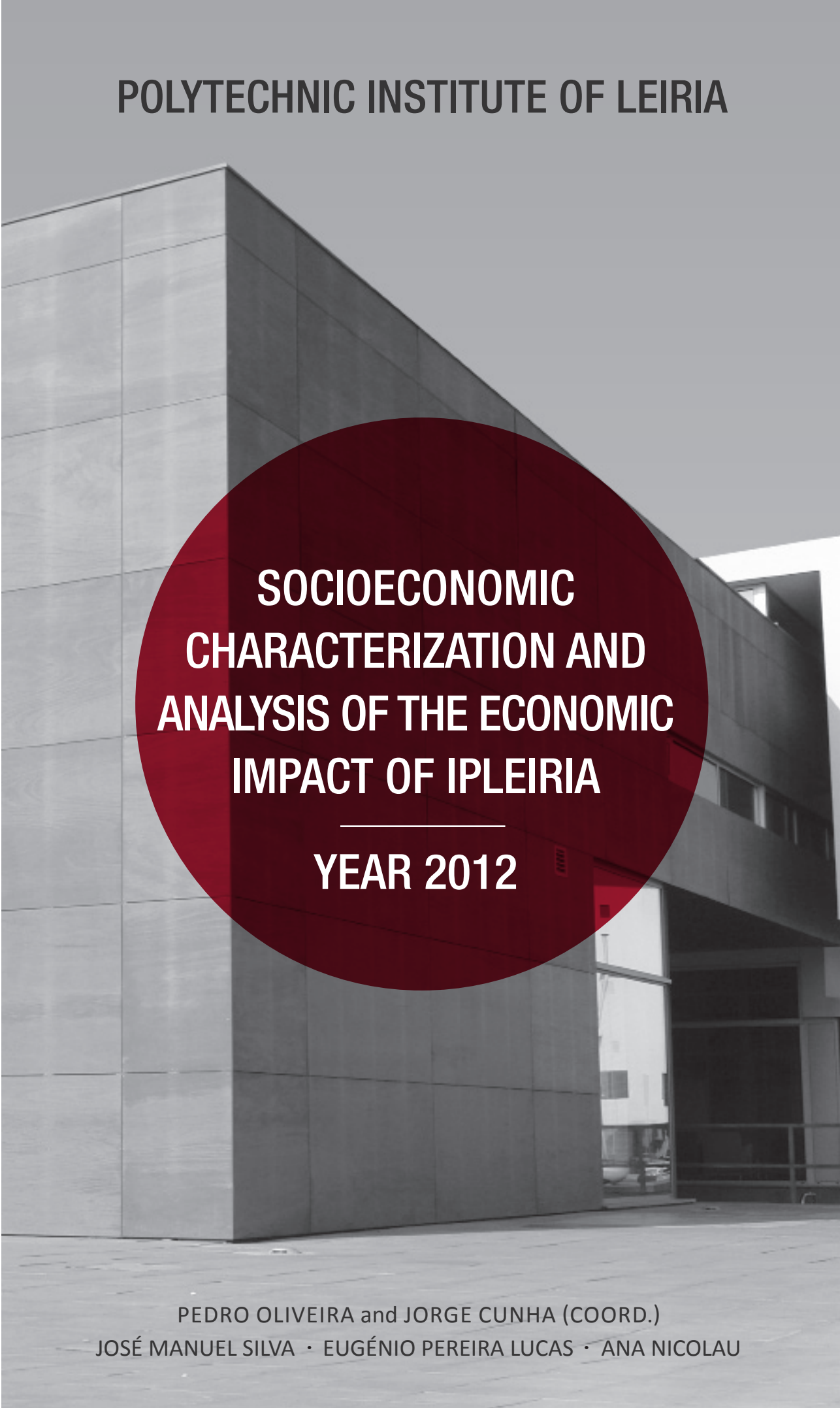
POLYTECHNIC INSTITUTE OF LEIRIA



SOCIOECONOMIC CHARACTERIZATION AND ANALYSIS OF THE ECONOMIC IMPACT OF IPLEIRIA

YEAR 2012

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TECHNICAL SPECIFICATIONS

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Socioeconomic characterization and analysis of the economic impact of the Polytechnic Institute of Leiria, in 2012

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ABBREVIATION LIST

ACE	American Council on Education Model
CIPSE	Research Centre of Politics and Educational Systems
DGES	Directorate-General of Higher Education
ESAD	Higher School of Arts and Design
ESECS	Higher School of Education and Social Sciences
ESSLei	Higher School of Health
ESTG	Higher School of Technology and Management
ESTM	Higher School of Tourism and Sea Technology
IES	Higher Education Institution
INE	National Institute of Statistics
IPB	Polytechnic Institute of Bragança
IPL	Polytechnic Institute of Leiria
NUT	Nomenclature of Territorial Unit
PIB	Gross National Product
SPSS	Statistical Package for the Social Sciences

INTRODUCTORY NOTE

It is generally accepted that institutions of higher education are especially well-equipped to promote the development of the regions in which they are located: because of the qualifications that result from their educational and training activities, because of the knowledge and innovation generated by research and development, and because of the social and cultural dynamics that are associated with their activities and initiatives.

But also due to the economic and financial impact that their activities have on the regions in question and particularly on the local councils in which they are based.

The cash flow generated by the people that constitute the academic communities - the students and the teaching and non-teaching staff - as well as the consumption and investments inherent to the actual functioning of the institutions, represent, directly and indirectly, large amounts of money, whose economic impact needs to be recognised.

The present study represents an important contribution to the understanding of this phenomenon and to furthering our knowledge of the economic impact of higher education institutions in the geographical areas in which they are located.

Based on a methodology that has been tested at an international level, and applied to a number of Portuguese and foreign institutions of higher education, the present work provides an array of information pertinent to the goal it aims to achieve, whilst also making it possible to compare other institutions of higher education in Portugal.

In the case of the Polytechnic Institute of Leiria - the particular characteristics of our institution, located, in a decentralised way, in three local councils of our district, Leiria, Caldas da Rainha and Peniche - the present study enables us to determine the economic impact of the institution, especially in the local councils where its 'Higher Schools' are located.

The information collated and the results obtained contribute to an accurate picture of the reality of our institution, resulting in the compilation of a data set of a socio-economic nature which is important for managing the institution.

To the authors and the coordinators of this study, I am grateful for the dedication and the effort that has gone into accomplishing it and congratulate them on the quality of the work carried out and on the contribution they make to the knowledge pertaining to higher education in the region of Leiria.

Nuno Mangas
President

1. INTRODUCTION AND GOALS

Taking the practice of other countries and recommendations of international organizations into account, higher education institutions (IES) are showing a growing concern in estimating the economic impact resulting from their activity in the regions where they are inserted; regional decision-makers and the population in general also show interest in knowing about that reality and also evaluate its importance in local and regional development.

In the current context of economic crisis and budget constraints, institutions are required to have a culture of accountability that can justify public financing involved in students' qualification and in the production and spread of knowledge. Therefore, it has become urgent for IES to justify how their financial means are used and the impact they cause in the regions where they are established.

In 2007, a study of the impact of Polytechnic Institute of Bragança (IPB) on this region was carried out within the scope of a doctoral thesis (Fernandes, 2009); this study inspired a joint project, started in 2012, amongst seven polytechnic institutes – Bragança, Castelo Branco, Leiria, Portalegre, Setúbal, Viana do Castelo and Viseu – aimed at replicating it by using similar methodology and instruments, under joint coordination, with the goal of estimating the economic impact resulting from the activity of each institution involved, on the respective region of influence.

The study on the Polytechnic Institute of Leiria (IPL) was carried out by José Manuel Silva, Eugénio Lucas and Ana Nicolau, from the Research Centre of Politics and Educational Systems (CIPSE) that integrated the project team coordinated by Pedro Oliveira (ICBAS/Oporto University) and Jorge Cunha (Minho University), that included Joana Fernandes (IPB), Sara Nunes and Luís Farinha (IP Castelo Branco), João Alves and Cristina Pereira (IP Portalegre), Luísa Carvalho and Sandra Nunes (IP Setúbal), Florbela Correia (IP Viana do Castelo) and Manuela Ferreira (IP Viseu).

The methodology used relied on the application to the Portuguese context of a simplified model based on the works of Caffrey & Isaacs (1971) , already used by Fernandes (2009), that estimates the economic impact of higher education institutions from the analysis of the expenses made by students, staff members, teachers and services of those institutions, in the regions in which they are based.

The necessary information was collected through an online questionnaire survey applied to students, teachers and staff members, which was answered between May and August 2012, and which made it possible to characterize the socioeconomic features of each of these groups and also information about the expenses made during the period of time under study; simultaneously, some elements related to the expenses of the institution, during the same period, were obtained from the information given by IPL financial services.

The estimation of the economic impact of IPL on the region was calculated from the treatment of this data and the application of the adequate methodological instruments, IPL, taking into consideration the municipalities of Leiria, Caldas da Rainha and Peniche, where schools are situated and the target population is concentrated.

It was concluded that, in the period of time under study, there was a direct and indirect impact superior to 171,7 million Euros, which corresponds to a return of 8,07 Euros per each Euro invested by the State in IPL financing and to a weight of 5,98% in PIB of the considered municipalities, together with the creation of 6.321 jobs, which represent 6,27% of the working population of these municipalities.

2. CHARACTERIZATION OF THE INSTITUTION AND REGION

2.1. THE POLYTECHNIC INSTITUTE OF LEIRIA

The Polytechnic Institute of Leiria was created in 1980[1] , and it is a l*egal person of public law with statuary, administrative, financial and property autonomy*[2]. With its head offices in Leiria, it has schools in the cities of Leiria, Caldas da Rainha and Peniche and a research unit in Marinha Grande, and sees its mission to disseminate knowledge, to create, share and disseminate culture, science, technology, arts and research work.

IPL is one of the main development agents of a vast region that extends over the Centre and Western part of Portugal; it values cooperation with economic agents, inclusion, social responsibility, creativity and a critical and entrepreneurial spirit. It welcomes students from all over the country and it places the internationalization and mobility of students, teachers and collaborators as one its priorities.

In May 2012, the academic community of IPL included 12.102 students, in different training levels, 980 teachers and 310 technical and administrative staff members distributed by five Higher Education Schools: Higher School of Education and Social Sciences; Higher School of Technology and Management; Higher School of Arts and Design; Higher School of Tourism and Sea Technology; and Higher School of Health. It also includes an Institute of Research, , Development and Advanced Studies (INDEA), which includes 13 research centres, one Distance Learning Unit (UED), one Training Centre for Technological Specialization Courses (FOR.CET), one Autonomous Research Unit and the Centre for Fast and Sustained Product Development (CDRsp).

IPL offers63 undergraduate degrees (in daytime, night time and distance learning regimes), 46 master degrees and 20 post-graduate courses; its educational offer is characterized by an extensive multidisciplinarity, with courses in diverse areas of knowledge: Arts and Design; Sciences; Education Sciences and Teacher Training; Law, Social Sciences and Services; Economics, Management and Accountability; Physical Education, Sport and Performing Arts; Human Sciences, Secretarial and Translation; Health; Technologies; Tourism and Leisure.

IPL was the first Portuguese institution of polytechnic higher education authorized to teach degrees in distance teaching regime, offering four undergraduate degrees in this regime and countless other formations.

The growth of IPL can be evaluated by the evolution of the number of students, teachers and staff members, as can be seen in Figures 1, 2 and 3.

[1] Decree-Law n. º 303/80, of August 16.
[2] According to the n.º3 of article 1 of law n.º 54/90, of September 5 – Law of the Statute of Autonomy of Polytechnic Higher Education Establishments

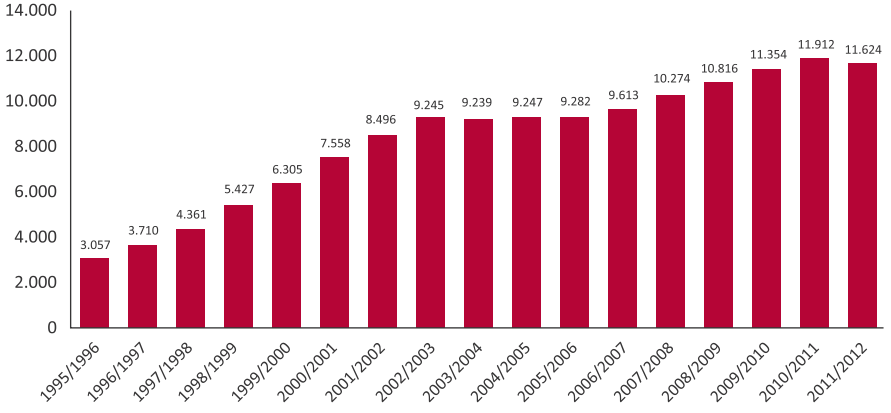


Figure 1 - Total of students per school year

Source: Direction of IPL Planning and Strategic Development Services

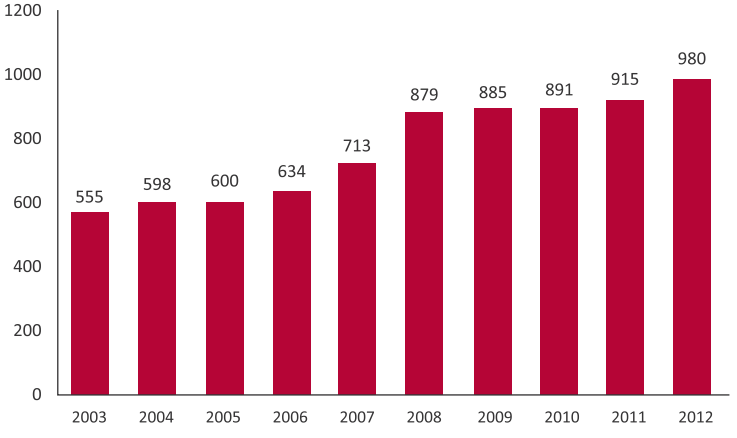


Figure 2 - Total of teachers per year

Source: Direction of IPL Planning and Strategic Development Services

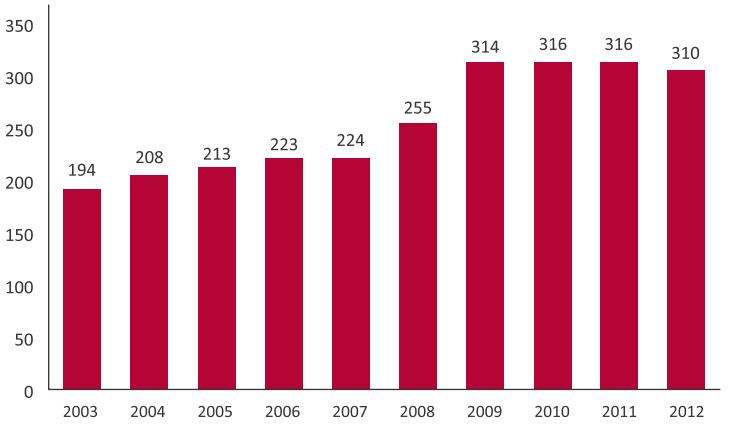


Figure 3 - Total of staff members per year

Source: Direction of IPL Planning and Strategic Development Services

2.2. THE REGION OF LEIRIA

IPL is an institution whose institutional area of influence is the municipality of Leiria, which belongs to NUT II/Centre, with 2.327.775 inhabitants; however, for the purposes of this study, it was impossible to measure the impacts on the entire region so, according to basic methodology, it was decided to measure the impacts on the municipalities where IPL has schools, that is, Leiria, Caldas da Rainha and Peniche. The municipality of Marinha Grande was not taken into consideration because it only has one research unit, although the impacts resulting from the activity of CDRsp are included in the municipality of Leiria as a whole.

The municipality of Leiria belongs to NUT III Pinhal Litoral, with 260.942 inhabitants and the municipalities of Caldas da Rainha and Peniche belong to NUT III West, 362.540 inhabitants.

Table 1. Summary of the Portuguese population indicators

	Portugal (Continent) (NUT I)	Centre (NUT II)	Pinhal Litoral (NUT III)	West (NUT III)	Leiria	Caldas da Rainha	Peniche
Population (2011)	10.047.621	2.327.755	260.942	362.540	126.897	51.729	27.753
0-14 years	1.484.120	319.258	38.975	54.957	19.317	7.539	4.119
15-24 years	1.079.493	239.248	28.419	37.400	14.558	5.493	2.867
25-64 years	5.546.220	1.247.499	143.161	197.315	70.986	27.877	15.065
65 years or more	1.937.788	521.750	50.387	72.868	22.036	10.820	5.702
Illiteracy rate (2012)	5,20%	6,39%	6,03%	6,09%	4,65%	5,57%	6,05%
Gross birth rate (2010)	9,5%	8,0%	8,7%	9,4%	8,9%	8,7%	9,9%
Gross mortality rate (2010)	9,9%	11,4%	8,9%	11,3%	7,9%	10,2%	11,7%
Aging index (2012)	131	164	130	134	115	144	139
Number of hospitals (2011)	202	56	3	9	2	3	1
Doctors per inhabitant (2012)	4,1‰	3,6‰	2,0‰	1,5‰	3,0‰	3,0‰	1,5‰
PIB *per capita* (2011)	16.202 €	13.656€	a)	a)	a)	a)	a)
Purchasing power *per capita* (2012)	100,46	84,41	88,74	88,59	99,91	98,73	86,08
Working population (2011)	4.150.252	940.211	113.204	152.172	57.777	21.097	10.972
Unemployment rate (2011)	13,19%	10,98%	9,29%	11,36%	8,97%	13,71%	14,53%
Participation rate (2012)	47,58%	45,38%	47,82%	47,35%	50,02%	47,27%	46,25%

a) Unavailable values

Source: INE (accessed in 03/03/2013, available in www.ine.pt)

According to data available in 2011, Leiria is a region with 126.897 inhabitants, with a population density of 224.5 inhabitants/km^2, an aging index of 114.7 and a purchasing power index of 99,91 (the national average index is 100,00), according to data available in 2012, provided by INE.

In the year of 2011, the region of Caldas da Rainha had 51.729 inhabitants, a population density of 202,3 inhabitants/km^2, an aging index of 144,4, and a purchasing power index corresponding to 98,73.

In 2011, Peniche had 27.753 inhabitants, a population density of 357,9 inhabitants/km^2, an aging index of 139,2 and a purchasing power index corresponding to 86,08.

In Caldas da Rainha and Peniche a very similar distribution between men and women can be observed, although women are slightly more represented.

Table 2. Working population of the Centre of Portugal per level of education

Year 2011	No education	1st Cycle	2nd Cycle	3rd Cycle	Seconday and Post-Secondary	Higher Education	Total
Total	**79.100**	**377.700**	**222.700**	**271.300**	**221.700**	**160.000**	**1.332.500**
15-24 years	600	1.600	9.800	35.900	31.900	6.900	**86.700**
25-34 years	2.400	11.300	46.500	85.000	91.800	69.500	**306.500**
35-44 years	5.700	43.600	89.500	69.300	56.200	48.900	**313.200**
45-64 years	21.900	230.700	75.200	78.400	41.100	33.100	**480.400**
65 years or more	48.500	90.500	1.700	2.700	700	1.600	**145.700**

Source: INE (accessed in 03/03/2013, available in www.ine.pt)

It appears that the 1st cycle of basic education has the most expressive value for the total population, followed by the 3rd cycle. However, the value related to the population with higher education stands out, mainly in the echelons between 25 and 44 years old.

Table 3. Number of enrolled students per education level

Number of enrolled students (2011)	Nursery School	1st Cycle	2nd Cycle	3rd Cycle	Secondary	Higher Education (2011/2012)
Centre	58.441	93.777	56.944	98.352	93.488	81.319
Pinhal Litoral	7.173	11.250	6.561	12.478	11.122	7.657
West	9.884	16.085	9.411	15.093	13.615	2.728
Leiria	3.520	5.464	3.109	5.917	5.201	7.480
Caldas da Rainha	1.374	2.386	1.552	2.308	2.611	1.289
Peniche	761	1.168	745	1.304	994	1.288

Source: INE (2012) Statistical Yearbook of the Centre Region 2011.

According to the table, 97,7% of the students who come from Pinhal Litoral study in Leiria and 94,5% study in Caldas da Rainha and Peniche.

3. MATERIAL AND METHODS

3.1. ELABORATION OF THE QUESTIONNAIRES

The questionnaires were elaborated based on work by Buchanan et al. (1984), Caffrey & Isaacs (1971), Martins, Mauritti & Costa (2005, Seybert (2003) and also on their adaptation to the Portuguese context carried out by Fernandes (2009), who used them in the field work of his doctoral thesis.

In the case of teachers and staff members, the questionnaire includes three sections[3]: professional characterization, family and socio-demographic characterization and living conditions.

In the case of students, the questionnaire consists of six sections[4]: personal characterization, schooling path, current school situation, living conditions and family characterization.

3.2. SAMPLE SELECTION AND DATA COLLECTION

From the data provided by the Academic Services Direction and the Human Resources Services Direction, 500 students (300 from undergraduate degrees, 100 from master degrees and 100 from technological specialization courses), 120 teachers and 100 non-teaching staff members were selected at random.

In May 2012, the selected individuals received an email message from the president that revealed the importance of the study and the link they should access to complete the questionnaire; afterwards, several reminders were sent to the students who had not replied.

This resulted in a total of 661 valid answers (463 students, 102 teachers and 96 staff members) from which 231 were complete (346 students, 71 teachers and 55 staff members). For the analysis, only complete questionnaires were used.

3.3. DATA TREATMENT

For data treatment, *software* SPSS[5] 21.0 was used, together with descriptive statistics and statistical inference techniques. From these data, it was possible to obtain information on the socioeconomic characterization of teachers, staff members and students , which is presented in the following chapters.

[3] Attachments I and II
[4] Attachments III
[5] Statistical Package for the Social Sciences

4. TEACHERS

At this point, a comparison between the population (the 916 teachers considered) and the collected sample is initially made, regarding the following variables: sex, age, professional category, workplace and length of service; then, the inquired teachers' personal and socioeconomic characterization is presented.

4.1. COMPARING SAMPLE TO POPULATION

Table 4 allows to assess the sample representativeness, concerning sex.

Table 4. Comparison between population and teachers' sample per sex

	Population		Sample	
Sex	Frequency	%	Frequency	%
Male	520	53,1	44	62,0
Female	460	46,9	27	38,0
Total	980	100%	71	100%

Chi-square= 2,114 (p>0,05)

Source: IPL Human Resources Direction and teachers' questionnaire

There are no significant differences between the population and the collected sample, concerning sex.

Table 5 allows us to assess the sample representativeness concerning population, by age classes.

Table 5. Comparison between the population and the teachers' sample by age classes

	Population		Sample	
Classes	Frequency	%	Frequency	%
Up to 30 years	96	9,7	0	0
31 to 40 years	495	50,5	25	35,2
41 to 50 years	277	28,2	29	40,8
51 to 60 years	95	9,6	15	21,1
More than 60 years	17	1,7	2	2,8
Total	980	100%	71	100

Chi-Square= 22,382 (p<0,05)

Source: IPL Human Resources Direction and teachers' questionnaire

Through the analysis of Table 5, it appears that there are some significant differences between the population and the collected sample, concerning age. The sample and the population are not homogeneous regarding this factor. The low percentage of answers of age range "up to 30 years old" presents a very low value in proportion to the number of teachers who are part of IPL faculty in the same age interval.

Figure 4 illustrates the distribution of sample teachers in the considered age ranges. The average age of teachers who answered the questionnaire is 45,1 years old (median 45,0 years old).

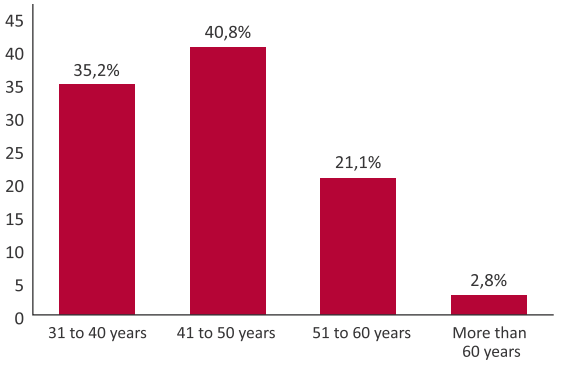


Figure 4. Distribution of sample teachers per age

The collected sample was also compared to the population, in terms of professional category.

Table 6. Comparison between the population and the teachers' sample per professional category

	Population		Sample	
Professional Category	Frequency	%	Frequency	%
Main coordinating teacher	1	0,1	0	0
Coordinating teacher	54	5,5	14	19,7
Adjunct teacher	287	29,3	35	49,3
Guest adjunct teacher or equivalent	44	4,5	7	9,9
Guest assistant or equivalent	589	60,1	15	21,1
Monitor	5	0,5	0	0
Total	980	100%	71	100%

Chi-square= 51,176 (p<0,05)

Source: IPL Human Resources Direction and teachers' questionnaire.

There are some significant differences between the population and the collected sample concerning professional category.

Table 7. Comparison between the population and the teachers' sample per workplace

	Population		Sample	
Workplace	Frequency	%	Frequency	%
ESAD	130	13,3	8	11,3
ESECS	134	13,6	14	19,7
ESTM	108	11,0	2	2,8
ESTG	328	33,4	42	59,2
ESSLei	86	8,7	4	5,6
Other Units	194	19,8	1	1,4
Total	980	100%	71	100%

Chi-square= 31,410 (p<0,05)

Source: IPL Human Resources Direction and teachers' questionnaire.

There are some significant differences between the population and the collected sample concerning the place where they work. ESTG teachers forkm the majority of those represented in the sample.

In conclusion, the teachers' sample does not correspond to the population in a perfect way, but that does not invalidate the analysis already done and the obtained results.

4.2 SAMPLE CHARACTERIZATION

The teachers' sample characterization begins with the analysis of their academic qualifications.

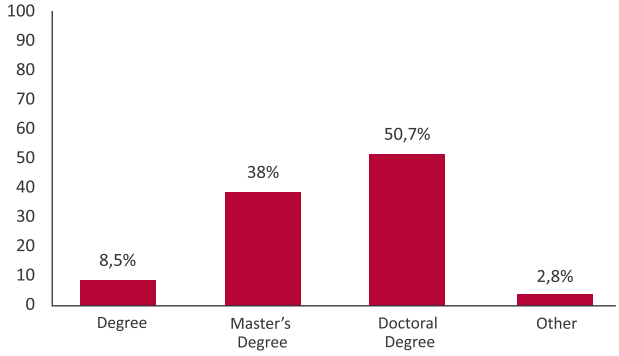


Figure 5. Distribution of sample teachers per academic qualification

Among the inquired teachers, more than half (approximately 51%) have a doctoral degree. This fact reveals one of the most relevant characteristics of IPL faculty, that includes 2,5 doctorates per each group of 100 students (31% doctorate teachers, in 2012).

The sample teachers were also questioned about changing their residence municipality to become part of the IPL teaching staff.

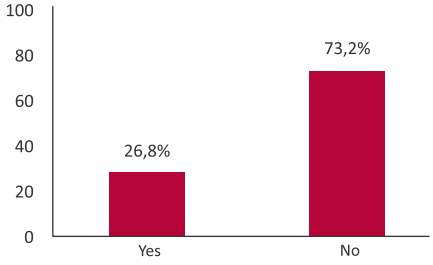


Figure 6. Percentage of sample teachers who changed/didn't change residence

Most teachers did not change residence to become part of IPL, which can be understood as an asset of the region, ensuring the permanence of those who were born or have lived there for a long time. Simultaneously, IPL strives to ensure the internal mobility and permanence of new residents.

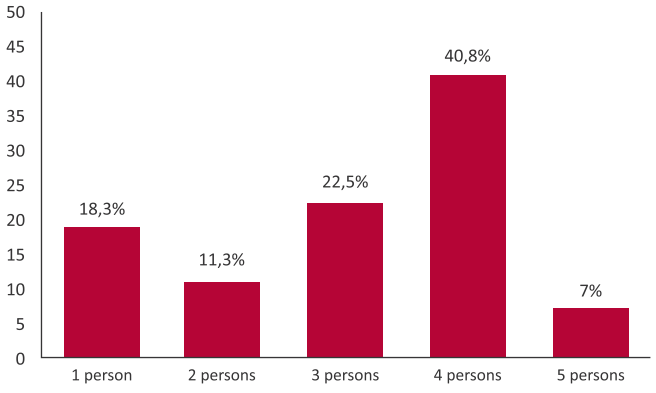


Figure 7. Number of persons who constitute sample teachers' household

The most representative household comprises three and four persons that represent families with one and two children. Among the inquired teachers, the maximum number of persons in the household is five.

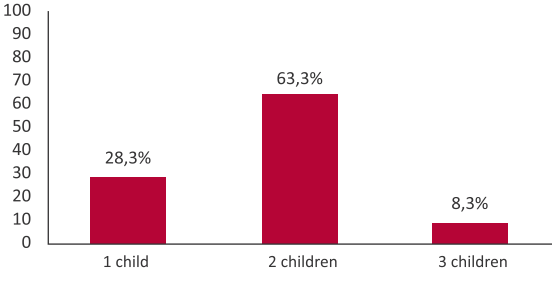


Figure 8. Sample teachers' children (total)

Bearing in mind the answers given by 60 teachers who have 3 or less than 3 children, the consists of a total of 106 children; the average age of the youngest child is 10,7 years old, but the percentiles 25, 50 and 75 are respectively in 3, 9 and 16 years old.

The distribution of teachers' children per public/private education system was also analyzed. Among 106 children, the collected information refers that 73 (67,6%) attend public education institutions and 35 (32,4%) attend private education institutions.

Table 8. Distribution of sample teachers' children per education level and type of institution

	Education Level							Total
Type of Institution	Nursery school	1st cycle	2nd cycle	3rd cycle	Secondary	Higher Education	Other	
Public institution	4	11	11	10	13	14	10	73
Private institution	15	7	4	4	1	1	3	35
Total	19	18	15	14	14	15	13	108

4.3. SOCIOECONOMIC CHARACTERIZATION (LIVING CONDITIONS)

Teachers' living conditions were characterized in the following ways: type of accommodation, monthly average income, monthly average expenses and household monthly average savings.

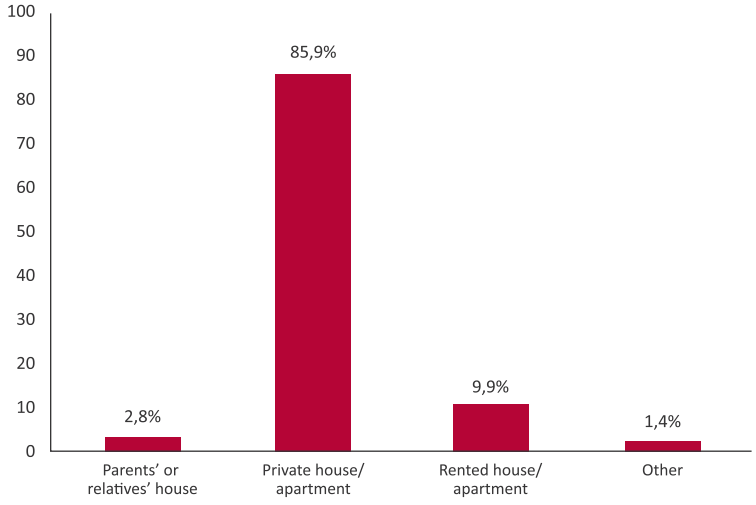


Figure 9. Type of accommodation during teachers' school time

Most inquired teachers live in their own house/apartment. None of the inquired teachers lives in a rented room and the teachers who live with parents/relatives did not change residence in order to work in IPL.

The inquired teachers were asked to identify their household gross income, considering the 9 possible classes, but only seven were mentioned. The inquired teachers' household average income was classified into seven categories, whose values vary in intervals of two monthly minimum salaries which, in 2012, corresponded to 485 Euros[6] (figure 10).

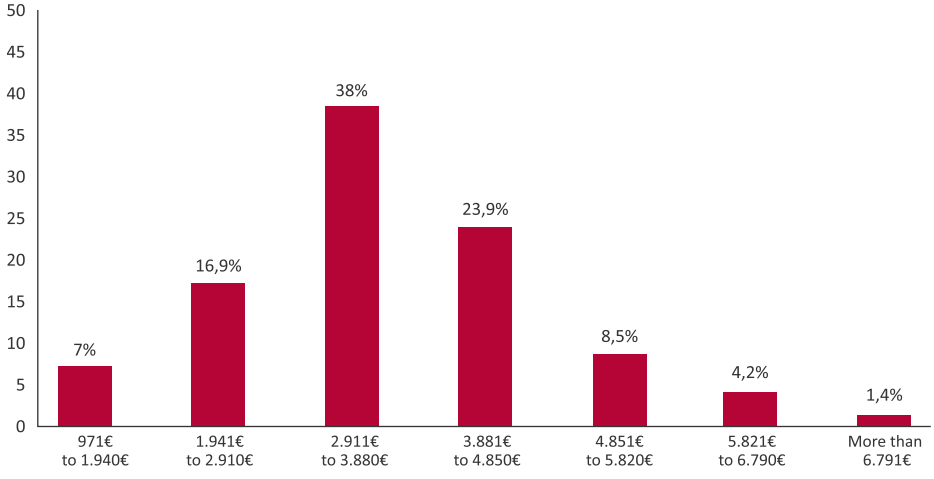


Figure 10. Sample teachers' household monthly gross income

[6] Decree-Law n.º 143/2010, of December 31st - SERIES I – nº 253

About 86% of teachers' household receive a maximum value of 4.850 monthly gross Euros and only 5,6% of teachers belong to a household that has a gross income superior to 5.821 Euros per month.

Teachers' household has a monthly average gross income of 3.668,7 Euros and it is estimated that it corresponds to a monthly average net income of 2.274,59 Euros[7]. This value is higher than the Portuguese families' monthly average net income, about 1.984 Euros, and superior to the monthly average net income of the households in the central region, estimated in 1.800 Euros[8].

It was also intended to characterize teachers' expenses and their respective household's expenses, in the following categories: accommodation, children's education, food, school material, personal goods, IT material, health, leisure, current expenses and other expenses.

As the variables related to the monthly average expenses were analyzed through open answer questions, they were recorded in several value intervals. In the case of accommodation, the answers were codified in *"up to 200 €", "from 201 to 400 €", "from 401 to 600 €", "from 601 to 800 €"* and *"more than 800 €".*

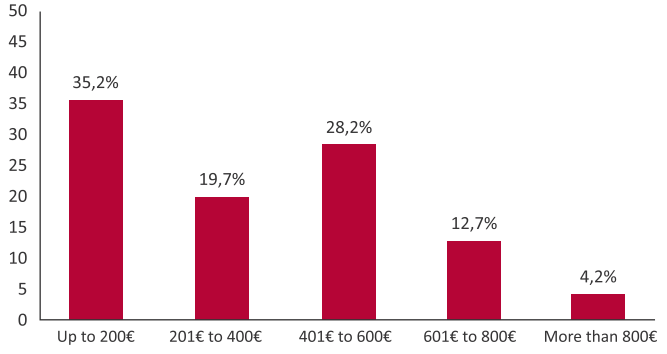


Figure 11. Sample teachers' household monthly average expenses for accommodation

In data analysis, an average of 406,8 Euros and a median of 400,0 Euros were identified. It should be stressed that 45,1% of teachers spend on accommodation, per month, a value which is approximate or higher than the national minimum salary.

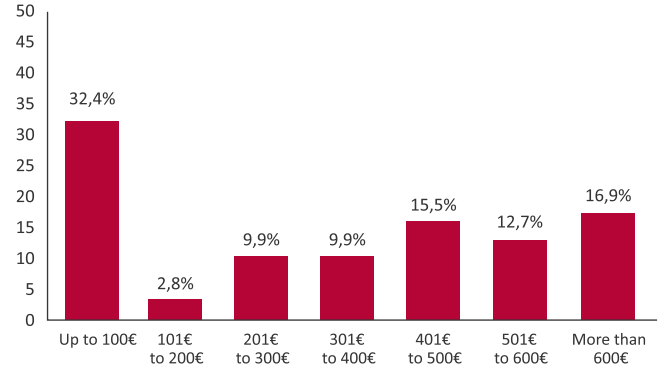


Figure 12. Sample teachers'' household monthly average expenses for their children's education

[7] This net income was estimated from the monthly gross average incomes, to which the corresponding IRS withholding tax rates were applied (tables for the Continent, 2012, dependent work, married two holders, two dependents) available in the General Department of Taxes (*www.dgci.min-financas.pt*) and considering monthly compulsory contributions of 11% for Social Security.

[8] Annual values estimated by INE (2012) for 2009, converted to monthly averages using weightings for a family structure identical to the one of the sample, without including the inflation rate.

The monthly value spent on education, per child, is 159,21 Euros[9].

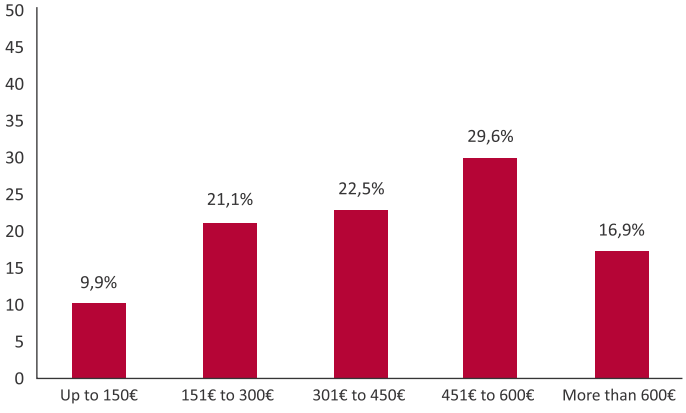


Figure 13. Sample teachers' household monthly average expenses for food

Teachers' household presents a monthly average expense for food of 467,6 Euros.

Then, the figures related to the different types of teachers' expenses are presented.

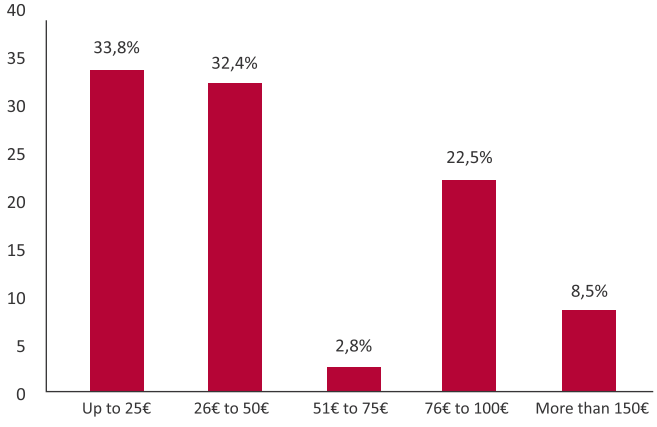


Figure 14. Sample teachers' household monthly average expenses for school material

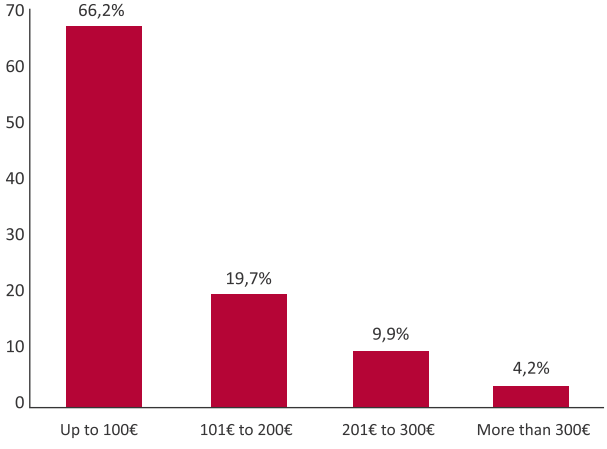


Figure 15. Sample teachers' household monthly average expenses for personal goods

[9] These values result from the division of the medium value of monthly expenses for children's education (318,42 Euros) by the average number of children per teacher (2 children).

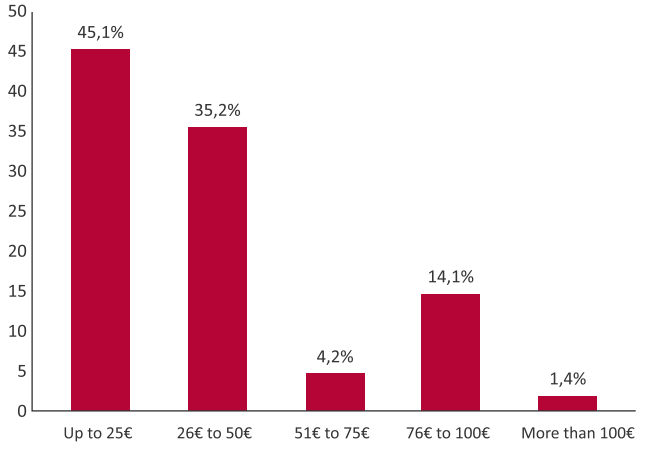


Figure 16. Sample teachers' household monthly average expenses for IP material

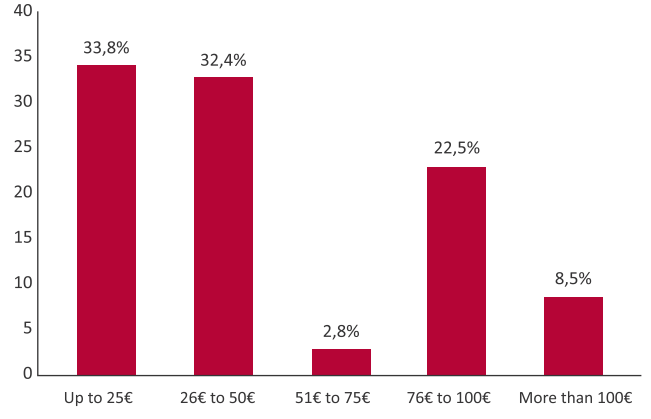


Figure 17. Sample teachers' household monthly average expenses for health

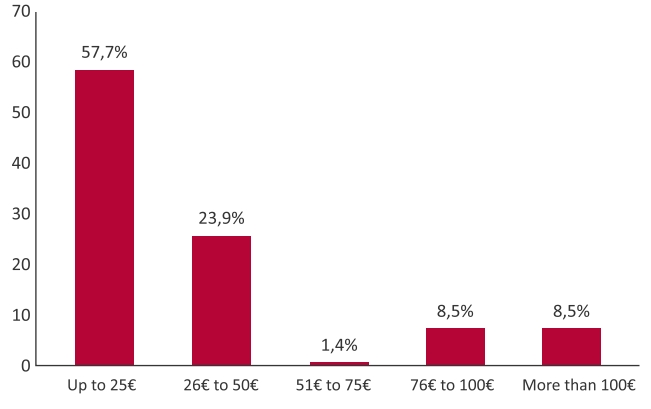


Figure 18. Sample teachers' household monthly average expenses for leisure

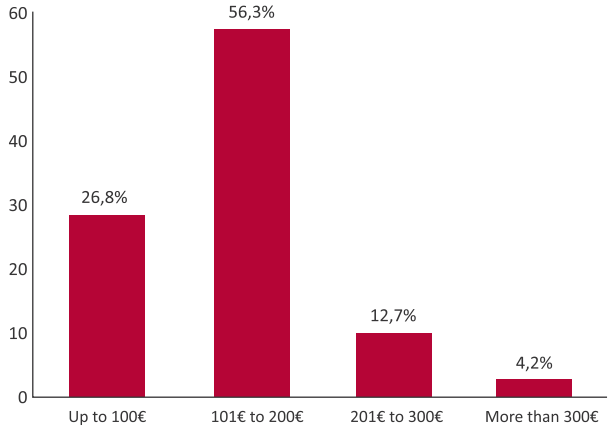


Figure 19. Sample teachers' household monthly average expenses for current expenses

The last considered category was "other expenses". In this category, most inquired teachers identify, as expenses, bank installments, their the salary of their domestic workers, the expenses for their own education and for insurance.

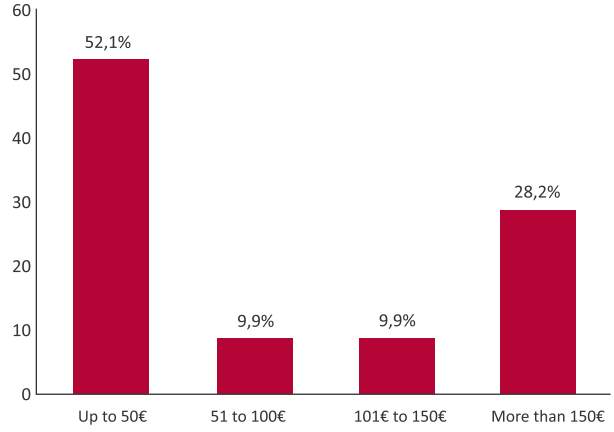


Figure 20. Sample teachers' household monthly average expenses for other expenses

Another potentially relevant expense is related to transportation. Among the inquired teachers, 70 have their own means of transport; all of them have, at least, one car (32,9% have one car, 62,9% have two cars and the remaining teachers have 3 cars), 2 have motorcycles and 11 have mopeds.

The expense for transportation was divided into two categories: the expenses for their own means of transport (including, among others, fuel, maintenance, repair services and insurance) and the expenses for other means of transport (including, among others, bus, taxi or air tickets). Figures 21 and 22 present values for each of these categories.

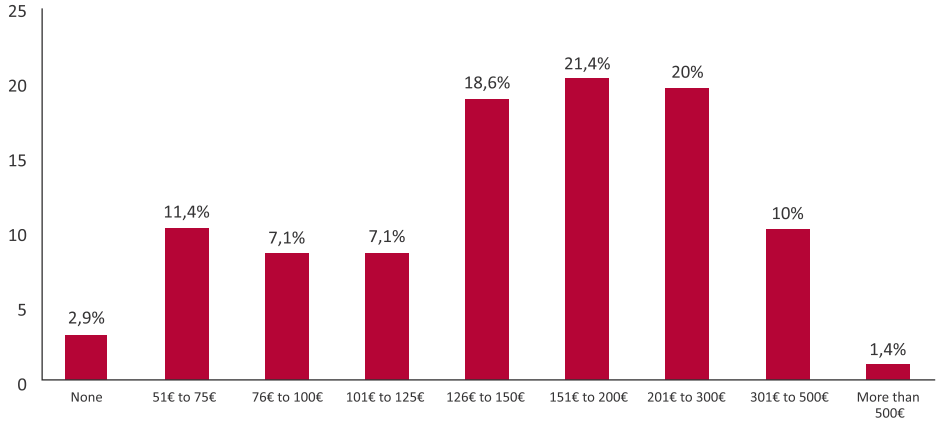


Figure 21. Sample teachers' household monthly average expenses for their own means of transport

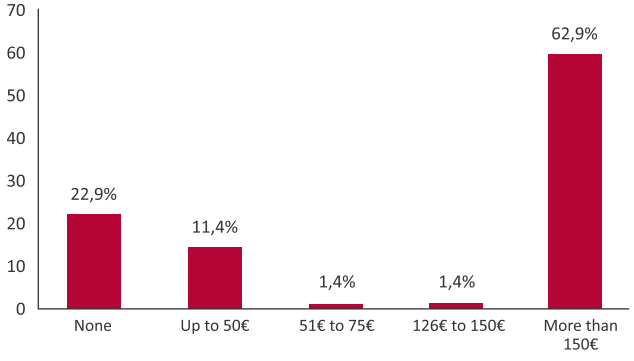


Figure 22. Sample teachers' household monthly average expenses for other means of transport

It appears that the inquired teachers spend much less on other means of transport, in comparison to the value they spend on their own means of transport.

The average expenses are:

• In the case of teachers who have their own means of transport (98,6%): 349,4 Euros per month (70 teachers) with their own means of transport and 20,9 Euros per month (25 teachers) with other means of transport.

• In the case of teachers who do not have their own means of transport (1,4%): they only have expenses for other means of transport in the amount of 15,2 Euros per month (1 teacher).

Table 9, which contains a summary of statistics, comprises the different categories of previous expenses.

Table 9. Summary of sample teachers' household monthly average expenses (in Euros)

	Accommodation	Food	Other expenses	Children's[10] education	Personal goods	Current expenses	School Material	Health	Leisure	IP material	Transportartion
N	52	65	38	47	62	66	56	60	49	54	68
Mean	**503,3**	**510,7**	**243,6**	**474,2**	**133,7**	**174,0**	**78,0**	**109,3**	**62,6**	**50,0**	**360,5**
Median	500,0	500,0	200,0	400,0	100,0	150,0	50,0	100,0	50,0	50,0	
Standard deviation	261,9	288,3	181,3	352,0	103,1	77,7	73,8	90,6	65,7	29,3	
Minimum [11]	50	50	50	50	20,0	50,0	10,0	20,0	5,00	10,0	
Maximum	1.500	1.500	940,0	2.000	500,0	400,0	500,0	500,0	300,0	120,0	
Percentile 25	325	325,0	100	300	50,0	117,5	42,5	50,0	20,0	25,0	
Percentile 75	600,0	600,0	350,0	500,0	150,0	200,0	100,0	150,0	70,0	60,0	

Most monthly expenses are for food and accommodation.

A new variable, named Total Expenses, was created by summing up all options of monthly expenses. The value shown is the sum of all values of the previous variables (except for transportation[12]). The result is expressed in figure 23.

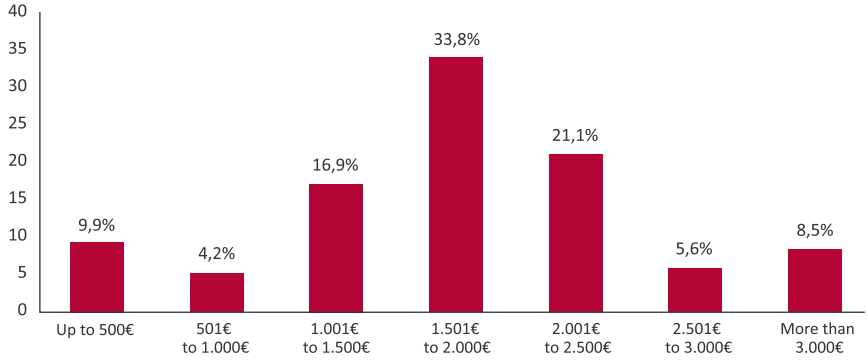


Figure 23. Sample teachers' household monthly average total expenses

Most inquired teachers' households (54,9%) spend up to 2.000 Euros per month; on average, the monthly expenses are 1.794,3€.

In order to make some comparisons with the *"Families' expenses survey 2010/2011"*, carried out by the National Institute of Statistics (INE, 2012), it was estimated the annual expenses for teachers' households (table 10).

[10] In this category, only the inquired teachers who have children were considered.
[11] It was considered as minimum the lowest value different from zero.
[12] The category "transportation" was calculated based on intervals, unlike the other categories in which the inquired teachers indicated an exact value, which prevented its inclusion in the variable *Total_expenses.*

Table 10. Table comparing teachers' and Portuguese families' household annual average total expense

Expense category	Sample (in euros)	Sample (in %)	Portugal (in %)	Centre (in %)
Accommodation and current expenses[13]	6.363,6	24,6	29,2	29,4
Education[14]	4.588,8	17,7	2,2	1,9
Food	6.128,4	23,7	13,3	13,2
Alcoholic drinks and tobacco	--	--	1,9	1,5
Clothing and shoes	--	--	3,7	3,7
Furniture, decoration articles	--	--	4,2	4,3
Personal goods[15]	1.400,4	5,4	6,3	6,7
Health	1.107,6	4,3	5,8	6,1
Leisure	518,4	2,0	5,3	4,7
Transportation	4.326,0	16,7	14,5	15,5
Communication	--	--	3,3	3,2
Other expenses	1.564,8	6,1	--	--
Hotels, restaurants, cafés or similar	--	--	10,4	9,8
Annual average expense per household	**25.858,8€**	**100%**	**100% (20 391 €)**	**100% (19 183 €)**
Monthly average expense per household	**2.154,9€**	**--**	**1.699,3 €**	**1.598,6 €**

Source: Teachers' questionnaire and INE (2012)

With table 10, it is possible to compare IPL teachers' household average expenses with the ones of the Portuguese families and NUTS II – Centre classification. From the table, it can be concluded that teachers present an annual expense 34,8% superior to the average of NUT II north region and 21,1% superior to the national average.

The teachers' distribution per workplace, residence municipality and number of working days was analyzed in order to determine which part of the obtained value is spent in the region of Leiria, Caldas da Rainha and Peniche. The following table describes the number of days sample teachers of the various schools stay in their workplace.

Table 11. Distribution of teachers per workplace and presence days

	Presence days in the workplace				Average of days per schools
	2	3	4	5	
ESECS	0	6	5	3	3,8
ESSLei	0	0	0	4	5,0
ESTG	1	6	14	21	4,3
ESTM	0	0	2	0	4,0
Other	0	0	1	0	4,0
Total	1	18	23	29	

[13] The values of the categories accommodation and current expenses were, respectively, 368,6 and 161,7 euros. The indicated value is the sum of both categories due to the fact that the referred study presents these two values in only one category *"Accommodation; expenses for water, electricity, gas and other fuels"*.
[14] The presented values are the sum of the categories *"children's education"* and *"school material"* (318,4 and 61,5 Euros, respectively), since the INE study only mentions the category *"education"*.
[15] This category is identified in INE study as *"other goods and services"* and the presented amounts are the ones that INE identified in that category.

On average, IPL teachers are 4 days in their workplace. The teachers of the schools in Leiria are 4,2 days in their workplace, while a teacher of the school in Caldas da Rainha is 3,4 days and in Peniche 4 days. It should be stressed that teachers' permanence in their workplace is less than 5 days, due to the work they develop in research units or in their own residence.

It is also necessary to analyze the visits that IPL teachers receive and the respective amount those visits spend in the region. It is intended to analyze the monetary flow that results exclusively from the fact that the visited teachers work in IPL.

This way, only the visits of teachers who changed their region to work in IPL were selected. It was considered that the teachers who didn't change their region would receive those visits whether they worked in IPL or not and, therefore, this value cannot be related to the existence of IPL in the region.

Figure 24 presents the number of visits teachers receive per year; it can be verified that most of them receive more than 10 visits per year.

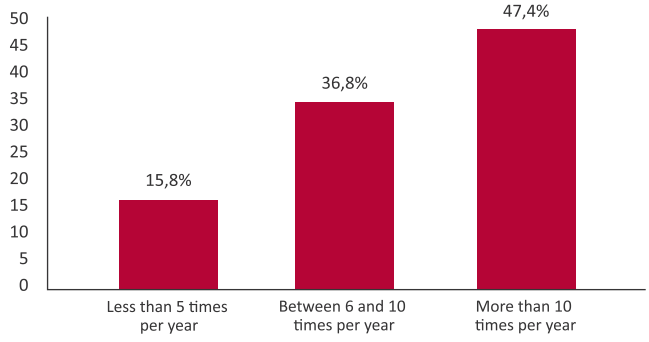


Figure 24. Annual frequency of the visits to sample teachers who changed residence

The following figure shows the permanence period of each visitor.

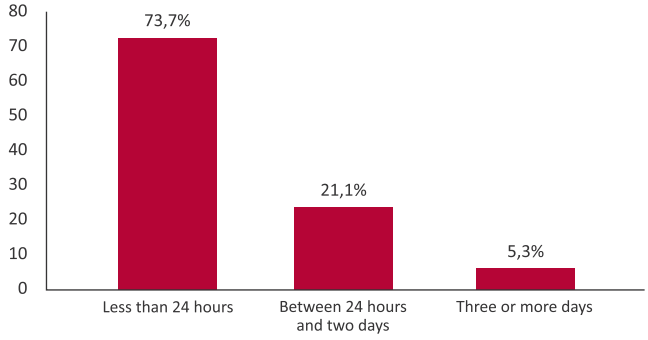


Figure 25. Duration of the visits to sample teachers who changed residence

Most visitors stay less than 24 hours, which shows that they are one day visitors, without much permanence time.

Concerning visitors, the last aspect taken into account was expenses during their stay.

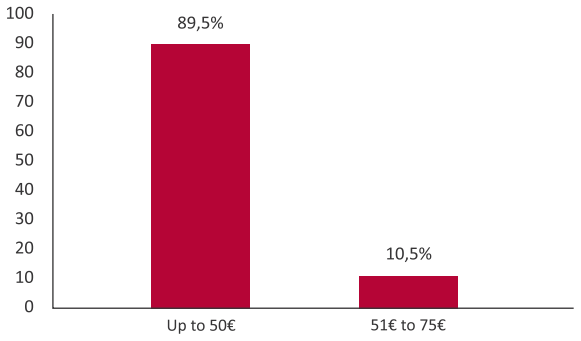


Figure 26. Daily average expense of the visits received by sample teachers who changed residence

By analyzing the received visits, it can be considered that IPL teachers who changed residence receive on average 9,0 visits per year; most visitors stay less than 24 hours and spend 29,0 Euros per day. This means each teacher contributes with 261 Euros to the region per year, in the form of their visitors' expenses.

In addition to the expenses made by teachers in the region, banking transactions" are also important to understand the development of the region, because it is through them that both the amount saved and the amount invested by teachers in the region can be determined.

Therefore, it was analyzed whether the salary and the monthly savings (when they exist) were deposited in a bank agency in the municipality where they work. Data indicate that 69,0% of teachers receive their salary through a bank account in a bank agency in the municipality where they work and that 60,6% have their savings in a bank agency in the same municipality.

Figure 27 shows teachers' average savings

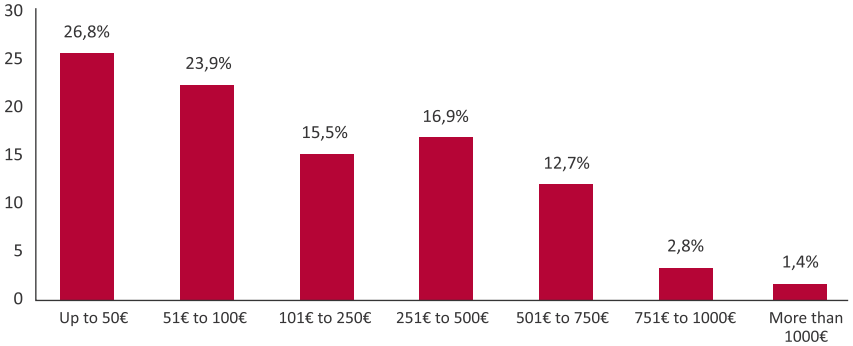


Figure 27. Sample teachers' monthly average savings, deposited in a bank account of the municipality where they work

Results show that 66,2% of the inquired teachers save up to 250 Euros per month, while 33,8% save more than 250 Euros. On average, the inquired teachers save 235,2 Euros per month.

In addition to teachers' direct salary debit and application of monthly savings, the study assessed the existence of loans in bank agencies of IPL action municipalities, specifically through the obtained initial amount and its destination.

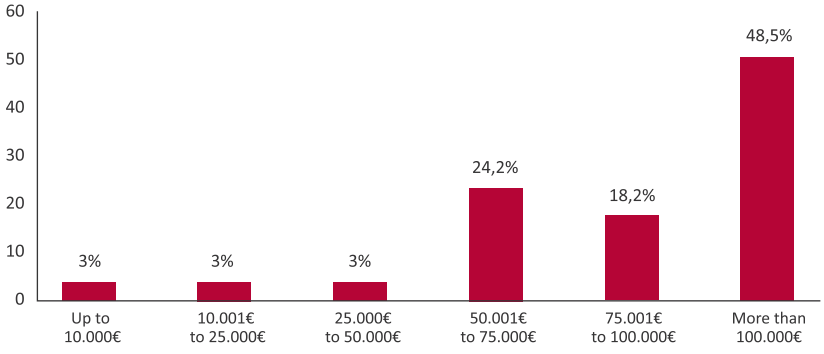


Figure 28. Initial amount of the loans contracted by sample teachers

Among the inquired teachers, 46,5% contracted bank loans in an agency in the municipality where they work; for 90,9% of this universe, the loan value is superior to 50.000 Euros.

The aim of the obtained loans could be to invest in buying private house/apartment, buying house/apartment as real estate investment (namely for renting), in an enterprise or in the purchase of a new car.

Table 12. Bank loans contracted by teachers, per category (in Euros)

	Private house	Rented house	Car	Other
N (%)	28 (39,4%)	3 (4,2%)	15 (21,1%)	1 (1,4%)
Mean	109.250,8	2.591,6	22.539,3	15.000,0
Median	125.000,0	500,0	25.000,0	15.000,0
Minimum	150,0	275,0	20,0	15.000,0
Maximum	200.000,0	7.000,0	45.000,0	15.000,0

Table 12 summarizes the investments made by sample teachers; the main ones were in buying a private house/apartment and buying a car. The loan values are higher in buying a private house/apartment, with an average of 109.250,8 Euros. The inquired teachers, who contracted a loan in order to buy a new car, invested, on average, 22.539,30 Euros.

It seems important to point out that none of the inquired teachers responded that they had invested money to establish a business.

4.4 SYNTHESIS OF THE ANALYSIS OF THE TEACHERS

Teachers are mostly males (53,0%), their average age is 45,1 years old and, on average, they have worked for IPL for 15,2 years. In terms of academic qualification, most of them (50,7%) have a doctoral degree and 38% have a master's degree.

In most cases (93,0%), teachers' household varies between 1 and 4 persons and when there are children in the family (53,3%), they are, with rare exceptions, at most 1 or 2 (91,7%). Teachers' household has a monthly average gross income of 3.668,7 Euros and has a monthly average total expense of 1.794,3 Euros (considering the expenses for transportation, the value rises up to 2.154,9 Euros).

In descending order of the presented average values, teachers' household main expenses are for food, accommodation, transportation, children's education and current expenses.

The first three categories focus 55,4% of household monthly expenses and, if the category housing is considered according to INE study methodology (accommodation and current expenses), this value rises up to 62,9% (being superior to the study value, that is 58,1%). It should be referred that, as it was stated in that study, the "main concern of family expenses" is with housing, however, IPL teachers present a value slightly inferior to the one of the Portuguese population under study, 24,6% instead of 29,4%.

The teachers who changed residence contribute with 261 Euros per year for the region, in the form of their visitors' expenses.

In terms of banking transactions, many teachers (46,5%) contract loans in bank agencies in the municipality where they work. The main destination of those loans is, in 39,4% of the cases, permanent private house/apartment, with an average value of 109.250,8 €, or for the purchase of a new car (21,1%), in the average amount of 22.539,3 €. In both cases, this investment was made in the municipality where they work. According to the teachers' answers, it was found that most of them (66,2%) save more than 250 Euros per month.

5. IPL STAFF MEMBERS

In the analysis of staff members, as in the case of teachers, a comparison between the staff members' population (310, in 2012) and the collected sample was initially carried out, considering the following variables: sex, age, professional category and workplace. Then, is the study presents a socioeconomic characterization of the 55 staff members who answered the questionnaire.

5.1 COMPARING SAMPLE TO POPULATION

Table 13 allows to assess the sample representativeness in relation to the population, concerning sex.

Table 13. Comparison between the population and the teachers' sample per sex

	Population		Sample	
Sex	Frequency	%	Frequency	%
Male	93	30,0	13	23,6
Female	217	70,0	42	76,4
Total	310	100%	55	100%

Chi-square=0,918 (p>0,05)

Source: IPL Human Resources Direction and staff members' questionnaire.

It appears that there are no significant differences between the population and the collected sample, in the variable under analysis.

Table 14. Comparison between the population and the staff members' sample per age echelons

	Population		Sample	
Classes	Frequency	%	Frequency	%
≤ 30	20	6,4	4	7,3
]30;40]	173	55,8	29	52,7
]40;50]	75	24,2	14	25,5
]50;60]	41	13,2	7	12,7
> 60	1	0,3	1	1,8
Total	310	100%	55	100%

Chi-square=2,074 (p>0,05)

Source: IPL Human Resources Direction and staff members' questionnaire.

It appears that there are no significant differences between the population and the collected sample, in the variable age.

The study also includes the comparison between the population staff members and the sample ones in the 9 professional categories considered, concluding that the sample presents some differences regarding the population (table 15).

Table 15. Comparison between the population and the staff members' sample per professional category

	Population		Sample	
Professional category	Frequency	%	Frequency	%
Chief executive	12	3,8	9	16,4
Senior technician	148	47,7	20	36,4
Technical assistant	103	33,2	20	36,4
Operations assistant	28	9,0	3	5,5
Computer technician	18	5,8	3	5,5
Other	1	0,3	0	0
Total	310	100,0	55	100,0

Chi-square=15,013 ($p<0,05$)

Source: IPL Human Resources Direction and staff members' questionnaire.

It was also verified whether any differences in relation to workplace existed. The staff members work in the five schools and also in the Central Services and Campus 5. In these questionnaires this is included in the category "Other", to be in line with the data sent by IPL Human Resources Department, that does not differentiate the five schools from the other units. In the variable workplace, the sample presents some significant differences regarding the population.

Table 16. Comparison between the population and the staff members' sample, per workplace

	Population		Sample	
Workplace	Frequency	%	Frequency	%
ESECS	19	6,1	8	14,5
ESTG	47	15,7	7	12,7
ESAD	32	10,3	12	21,8
ESTM	13	4,2	2	3,6
ESSLei	8	2,5	2	3,6
Other	191	61,6	24	43,8
Total	310	100%	55	100%

Chi-square=12,569 ($p<0,05$)

Source: IPL Human Resources Direction and staff members' questionnaire.

Analyzing the collected sample, it appears that it suits the population in almost all the categories under study. The characteristics "category" and "workplace" were exceptions.

In conclusion, it can be considered that the collected sample represents the population under study in an adequate way; for this reason, the results obtained in this sample can be extrapolated to the population.

5.2 SAMPLE CHARACTERIZATION

After verifying whether the sample suits the population, figure 29 shows the distribution of the sample staff members per years of service.

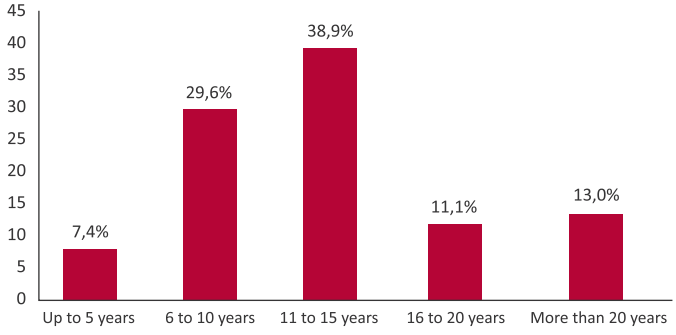


Figure 29. Distribution of staff members per years of service in IPL

Most sample staff members (38,9%) have worked in IPL for about 11-15 years, their average term of service is 12,1 years.

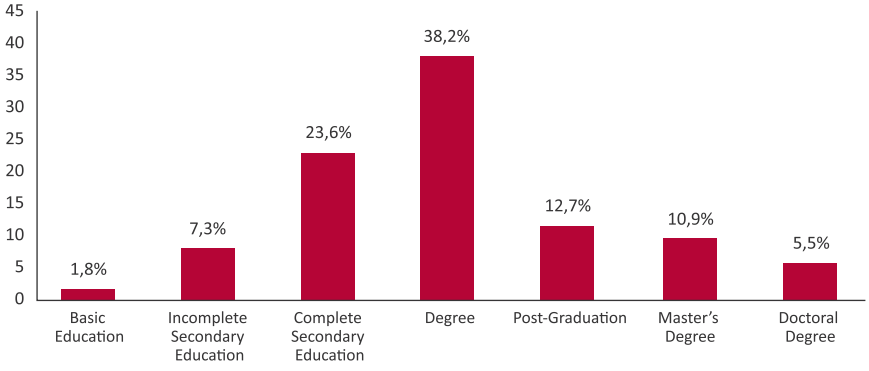


Figure 30. Distribution of sample staff members per academic qualification

32,7% of IPL staff members have complete secondary education; it is worth emphasizing that only about 9% of the inquired staff members answered that they have basic education or incomplete secondary education. It is also worth stating that a considerable percentage (29,1%) of staff members have a post-graduate qualification.

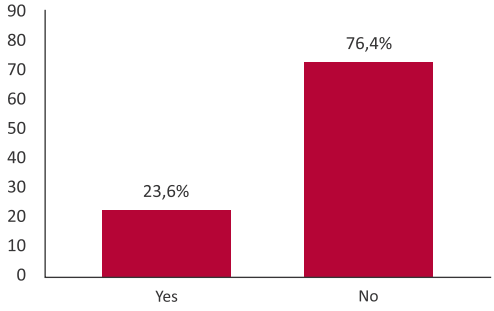


Figure 31. Number of sample staff members who changed/didn't change residence

In the analysis about residence change in order to work in IPL, it appeared that only 23,6% of the inquired staff members changed residence in order to work in IPL.

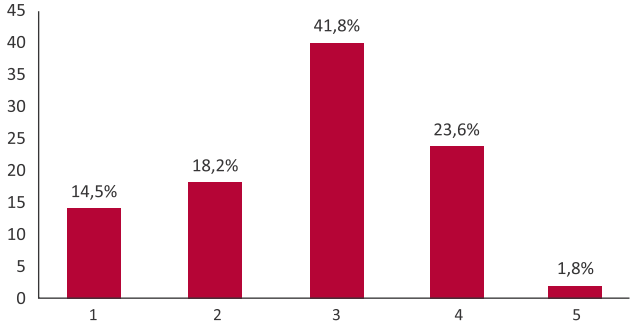


Figure 32. Number of persons who constitute the inquired staff members' household

In 65,4% of the cases, the household comprises 3 or 4 persons, in 18,2% by 2 persons, in 14,5% by 1 person and in 1,8% by 5 persons or more.

Among the inquired staff members, 76,4% stated that they have children. The number of children within the household varies between one child (50,0%), two children (42,9%) or at most three children (7,1%), in a total of 66 descendants.

The average number of children per female staff member of child-bearing age[16] is equal to 1,7 children and this value is superior to the synthetic fertility index of 2010, that is 1,4 children. The average age of the youngest child is 12,3 years (median 11,0).

The distribution of children per education system, public or private, was also analyzed. Among the 66 children, the collected information refers that 44 (78,5 %) attend public schools and 12 (21,4%) attend private schools. The following table shows the distribution between public and private schools considering the education cycles.

Table 17. Distribution of sample staff members' children per education cycle and type of institution

	Education level							Total
Type of institution	Nursery school	1st cycle	2nd cycle	3rd cycle	Secondary	Higher Education	Other[17]	
Public institution	3	9	5	3	6	15	3	44
Private institution	12	0	0	0	0	0	0	12
Total	15	9	5	3	6	15	3	56

As it can be seen, the inquired staff members did not give any information about all their children, a total of 66 children; only the distribution of 56 is available. That can result from the fact that these 10 children no longer attend school.

Table 17 leads one to conclude that staff members opt for private institutions when it concerns nursery schools and then their children attend public schools.

[16] According to INE definition, the child-bearing age of the female population is between 15 and 49 years-old.
[17] Staff members who identified as "other" the children who did not attend school any longer.

To sum up, it is possible to characterize IPL staff members who answered the questionnaire in the following aspects:

The staff members are mostly females (70%), with an average age of 40,9 years old and, on average, they have worked in IPL for 12,1. Most staff members work in the central services. Many of those staff members are from the municipality where they work and only 23,6% changed residence in order to work in IPL.

Most staff members have completed secondary education and 38,2% have a degree.

The staff members who have children (76,4%) have at least one child and at most three children In most cases, they opt for private institutions when their children attend the nursery school and, in the following education levels, they opt for public institutions.

5.3 ECONOMIC CHARACTERIZATION (LIVING CONDITIONS)

Staff members' living conditions were characterized in the following aspects: type of accommodation, monthly average income, average expenses and monthly average savings.

The first category – *accommodation* – is illustrated in the following figure.

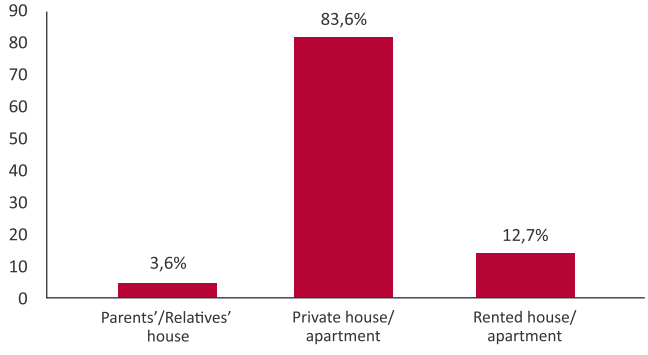


Figure 33. Sample staff members' type of accommodation during school time

The type of accommodation of staff members is mostly (83,6%) in a private house/apartment and 12,7% live in a rented house/apartment. None of the inquired staff members lives in a rented room.

The inquired staff members were asked to identify their household gross income (Figure 34).

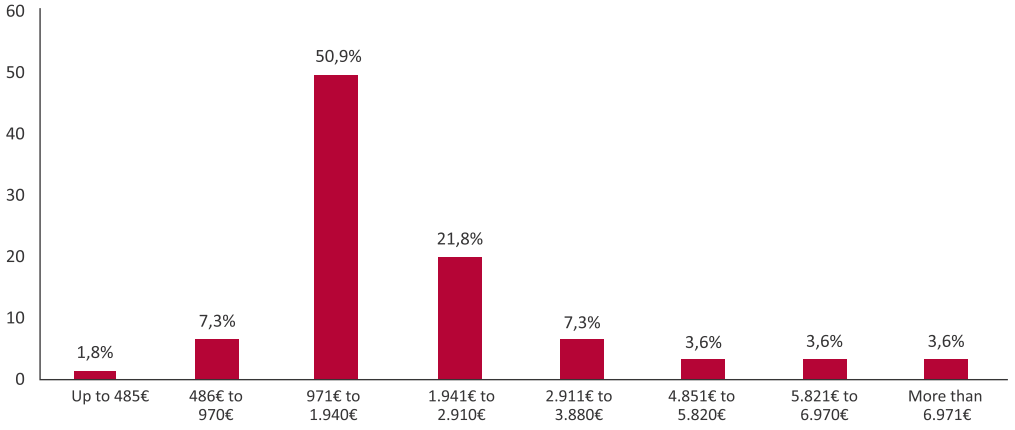


Figure 34. Sample staff members' household monthly income

It appears that 39,9% of the staff members who answered the questionnaire have gross incomes higher than 1.941€, corresponding to four national minimum salaries (485€). Most inquired staff members (50,9%) have an income between 971 and 1.940 Euros. Staff members' household average gross income is 2.268,9 Euros per month; in net terms, it is estimated that it can correspond to an average income of 1.474,8 Euros[18] per month.

Then, the staff members' household monthly average expenses were analyzed in relation to the following categories: accommodation, children's education, food, school material, health, leisure, personal goods, IT material, current expenses and others.

As the variables related to the monthly average expenses were analyzed through open answer questions, they had to be re-coded in several value intervals. For example, in the case of the first category accommodation, the following classes were considered: *"up to 200 €", "from 201 to 400 €", "from 401 to 600 €", "from 601 to 800 €"* and *"more than 800 €".*

Figure 35 shows the distribution of the expenses for accommodation into the five considered categories.

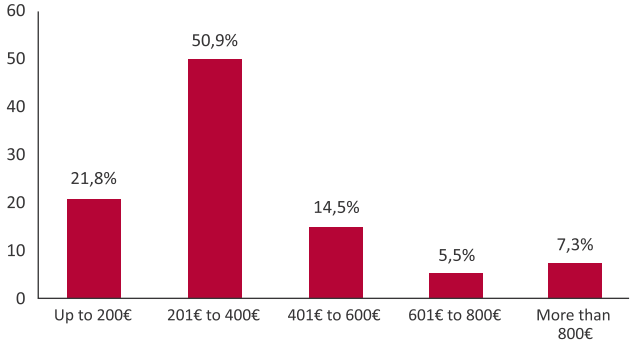


Figure 35. Sample teachers' household monthly average expenses for accommodation

[18] This net income was estimated from the monthly gross average incomes, to which the corresponding IRS withholding tax rates were applied (tables for the Continent, 2012, dependent work, married two holders, two dependents) available in the General Department of Taxes (*www.dgci.min-financas.pt*) and considering monthly compulsory contributions of 11% for Social Security. This is the same process already applied to the teachers.

The figure shows that most staff members (72,7%) spend at most 400 Euros per month on their household accommodation.

In the analysis of monthly average expenses for children's education, only the questionnaires of the staff members who have children were considered. Figure 36 characterizes these expenses.

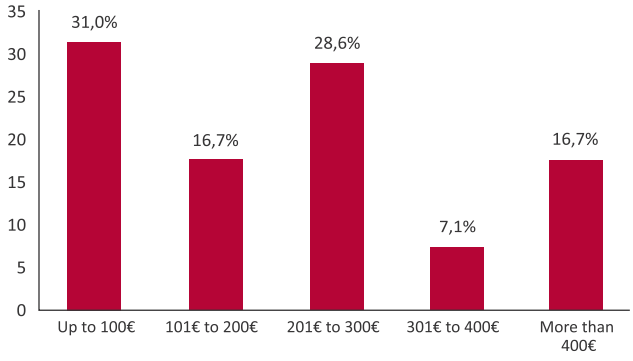


Figure 36. Sample staff members' household monthly average expenses for children's education

On average, the monthly expenses per child are 229,5 Euros (median 215,0€).

The figures related to the different types of expenses referred by staff members are presented in the following tables.

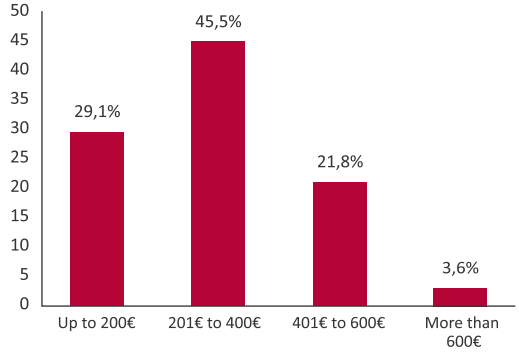


Figure 37. Sample staff members' household monthly average expenses for food

It appears that the most selected category is "from 201 to 400 Euros" (45,5%); however, the category of expenses for food "up to 200" also presents a high percentage of answers (29,1%).

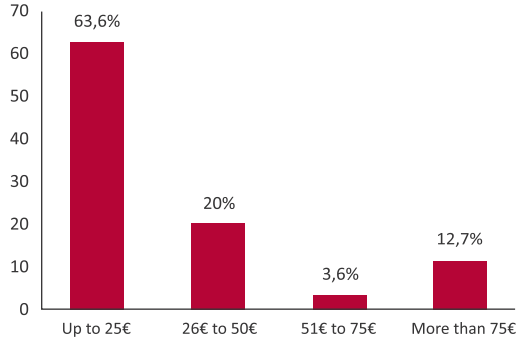


Figure 38. Sample staff members' household monthly average expenses for school material

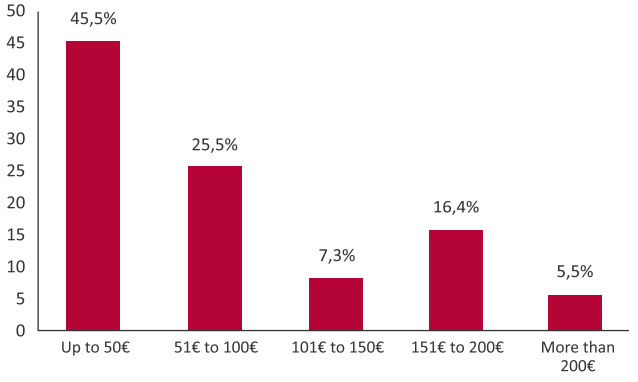


Figure 39. Sample staff members' household monthly average expenses for personal goods

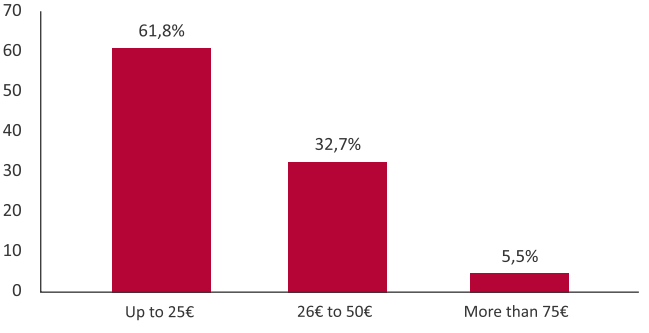


Figure 40. Sample staff members' household monthly average expenses for IT material

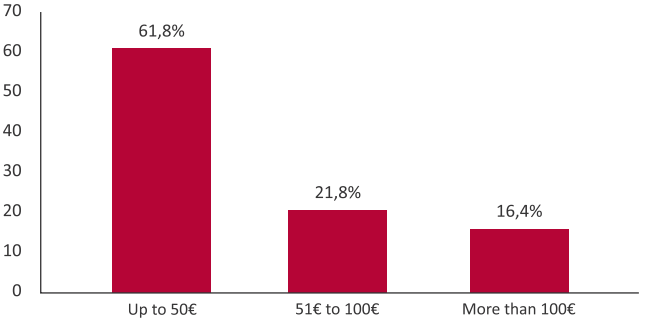


Figure 41. Sample staff members' household monthly average expenses for health

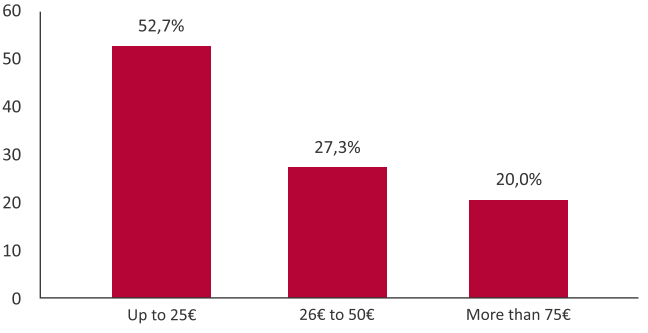


Figure 42. Sample staff members' household monthly average expenses for leisure

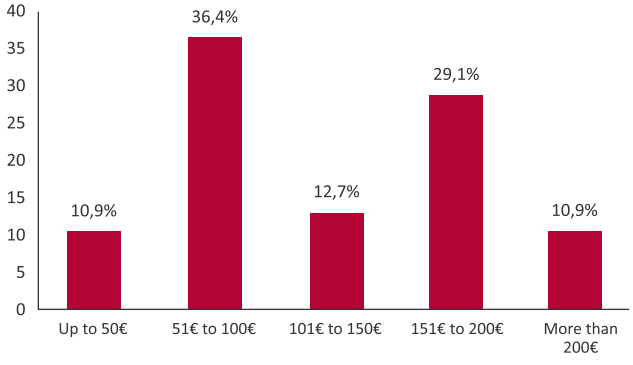


Figure 43. Sample staff members' household monthly average expenses for current expenses

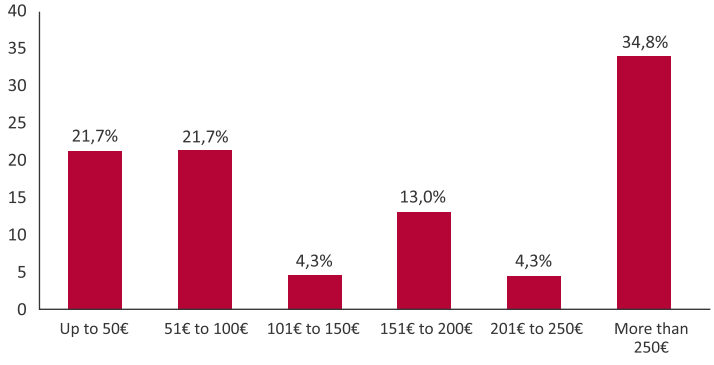


Figure 44. Sample staff members' household monthly average expenses for other expenses

As for the question whether they had any means of transport of their own and which one, it appeared that more than 90% of respondents have a car, and only 5 respondents own a motorbike and 3 a moped.

The monthly expenses for their own means of transport and also for other means of transport were analyzed. Figures 45 and 46 describe both situations.

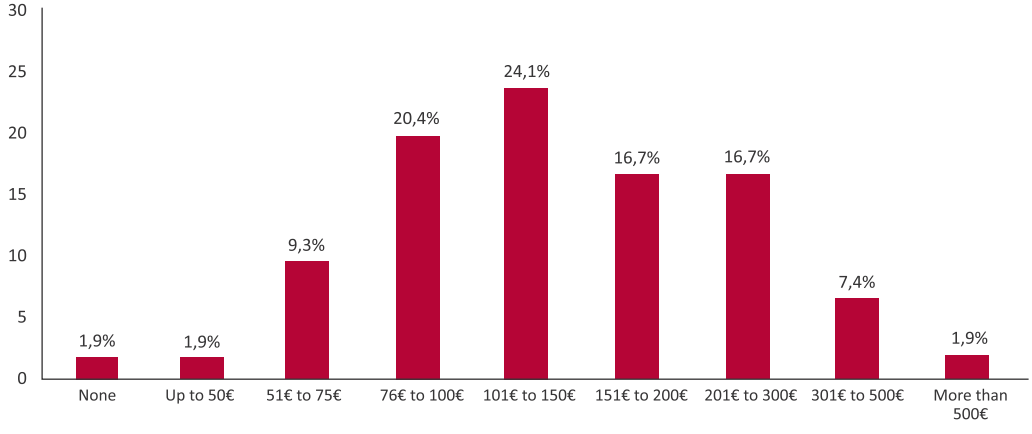


Figure 45. Staff members' monthly average expenses for their own means of transport

Most staff members spend at most 150 Euros per month on using their own means of transport.

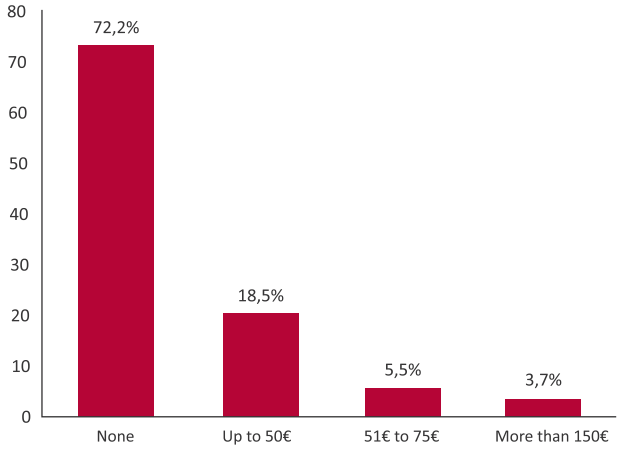


Figure 46. Staff members' monthly expenses for other means of transport

Staff members' expenses for other means of transport are low, in comparison to the expenses for their own means of transport (18,5% spend up to 50 Euros per month); most respondents (72,2%) do not t even have any expenses for other means of transport.

The average of monthly expenses for their own means of transport and for other means of transport is:
• If they have their own means of transport (98,2%), 240,3 Euros per month and 14,1 Euros per month, respectively (54 staff members).
• If they have no private means of transport (1,8%), they only have expenses for other means of transport in the amount of 50,0 Euros per month (1 staff member).

Table 18 comprises the various previous categories of expenses and it contains a summary of statistics.

Table 18. Summary of sample staff members' household monthly average expenses (in Euros)

	Accommodation	Food	Other expenses	Children's education [19]	Personal goods	Current expenses	School material	Health	Leisure	Transportation	IT material
N	47	53	23	36	23	51	51	50	33	55	35
Mean	**430,42**	**338,1**	**220,0**	**287,2**	**220,0**	**145,5**	**145,5**	**73,9**	**60,4**	**246,4**	**38,4**
Median	350,0	300,0	200,0	250,0	200,0	130,0	130,0	50,0	50,0		30,0
Pattern deviation	259,0	167,1	186,2	164,1	186,2	67,0	67,0	55,7	40,3		28,9
Minimum[20]	80	80	5,00	50	5,0	50,0	50,0	15,0	5,00		10,0
Maximum	1.500	800	700,0	700	700,0	300,0	300,0	270,0	150,0		150,0
Percentile 25	290	200,0	100,0	160	100,0	95,0	95,0	30,0	30,0		20,0
Percentile 75	500,0	475,0	300,0	400,0	300,0	200,0	200,0	100,0	100,0		50,0

Source: Staff members' online questionnaire.

This table shows that staff members spend their income mostly on accommodation and food, being their children's education the following most representative category.

[19] In this category, only the respondents with children were considered.
[20] It was considered as minimum the lowest value unequal to zero.

Considering only one variable named Total_expenses, as the sum of all monthly expenses of the different headings, the following total monthly average value is obtained (figure 47).

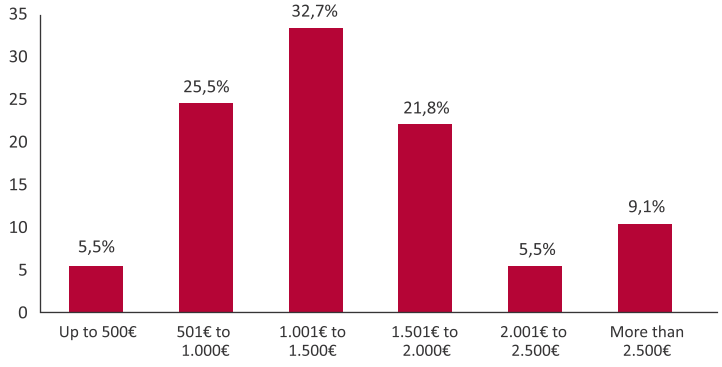


Figure 47. Staff members' household total average expenses per month

In terms of monthly average total expenses, among the 55 inquired staff members who presented values in the different headings, each household spends on average per month: with children (76,4%), 1.496,4 Euros per month (median 1.350,0 Euros) and with no children (23,6%), 876,1 Euros per month (median 844,0 Euros).

The first three categories focus 47,9% of the household monthly expenses and, if the category housing is considered as it is presented by INE (accommodation + current expenses), this value rises up to 53,2%.

The monthly average expenses were estimated annually for staff members' households and compared with the "Family expenses survey 2010/2011", carried out by the National Institute of Statistics (INE, 2012), (table 19).

Table 19. Table comparing staff members' and Portuguese families' household average total expense per year

Expense categories	Sample (in Euros)	Sample (in %)	Portugal (in %)	Centre (in %)
Accommodation and current expenses[21]	6.911,04	11,1%	29,2	29,4
Education[22]	5.566,8	8,9%	2,2	1,9
Food	4.057,2	64,2%	13,3	13,2
Alcoholic drinks	--	--	1,9	1,5
Clothing and footwear	--	--	3,7	3,7
Furniture, decoration articles	--	--	4,2	4,3
Personal goods[23]	2.640	4,2%	6,3	6,7
Health	886,8	1,4%	5,8	6,1
Leisure[24]	724,8	1,2%	5,3	4,7
Transportation	2.956,8	4,7%	14,5	15,5
Communications	--	--	3,3	3,2
Other expenses	2.640,0	4,2%	--	--
Hotels, restaurants, cafés and alike	--	--	10,4	9,8
Annual average expense per household	**26.383,4**	**100%**	**100% (20 391 €)**	**100% (19 183 €)**
Monthly average expense per household	**2.198,6**	**--**	**1.699,3 €**	**1.598,6 €**

Source: Staff members' and INE online questionnaire (2012).

[21] Per capita values of the categories *"accommodation"* and *"current expenses"* were, respectively, 146,0 and 40,8 Euros. The indicated value is the sum of both categories due to the fact that the referred study presents these two values gathered in only one category *"Housing; expenses for water, electricity, gas and other fuels"*.
[22] The presented values are the sum of the categories *"children's education"* and *"school material"* (154,8 and 104,4 Euros, respectively), since only the category *"education"* is included in INE study.
[23] In the study, this category is identified as *"other goods and services"* and the amounts presented are the ones that INE identified in that category.
[24] In this category, it was added the IT expense, since in INE study they are gathered in only one category *"leisure, amusement and culture"*.

Through table 19, IPL staff members' household average expenses and average expenses of the Portuguese population and of the classification NUTS II – Centre can be compared. On average, staff members' families spend more 37,5% than those of the region NUT II Centre and less 29,4% than the Portuguese families.

Another aspect analyzed was the number of visits staff members receive, the duration of those visits and the respective daily expenses. As can be seen in figure 48, the number of annual visits received by sample staff members who changed region in order to work in IPL. It is considered that those who didn't change region would receive those visits regardless of working or not working in IPL and, therefore, this value wouldn't be directly related to IPL.

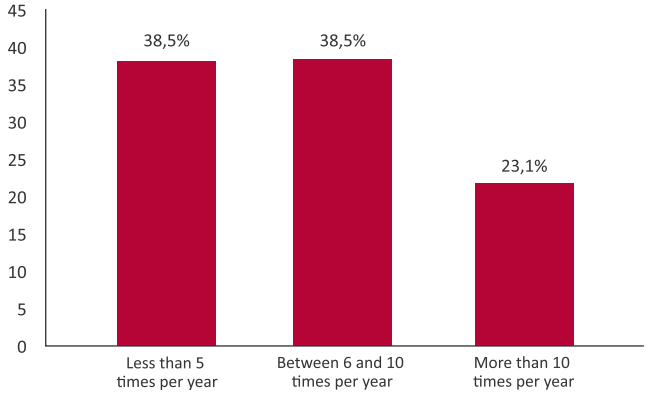


Figure 48. Number of visits received by sample staff members who changed residence

In figure 49 the duration of each visit is referred to, which in 46,2% of the cases is between 24 and 48 hours, and in 38,5% less than 24 hours, which does not show us, with a any degree of certaintyif visitors spend the night.

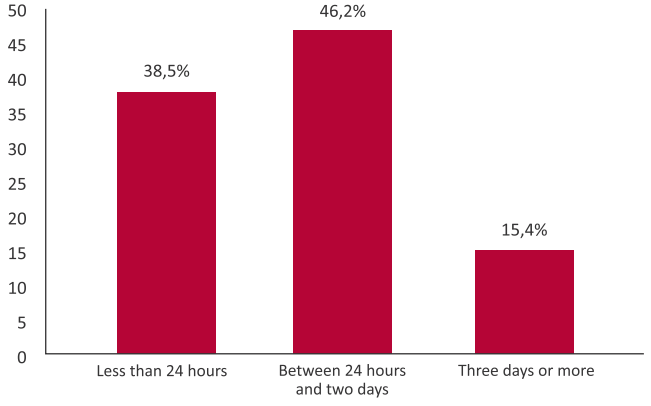


Figure 49. Average duration of the visits received by sample staff members who changed residence

Another aspect related to the received visits is knowing about the value spent during their stay. This value is described in figure 50.

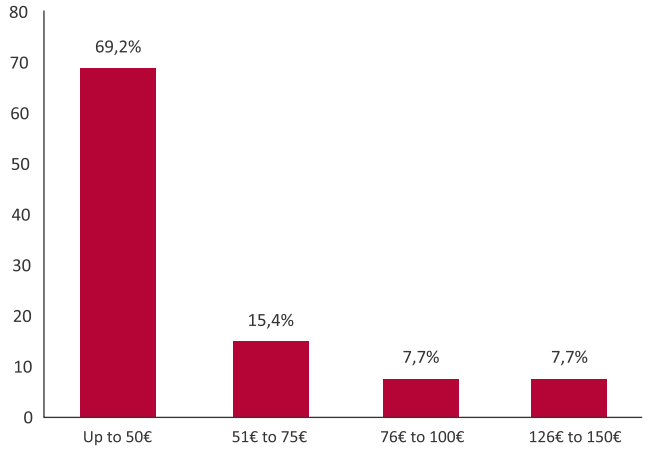


Figure 50. Daily average expense of the visits received by sample staff members who changed residence

From the previous figures about received visits, it can be considered that IPL staff members who changed residence receive on average 6,8 visits per year; each visit stays on average 34,1 hours, that is about one day and a half, and spends 44,4 Euros per day. So, each staff member introduces in the region 452,8 Euros per year, in the form of his/her visitors' expenses.

It is also necessary to analyze the banking transactions in the regions under consideration; for that purpose, salary deposits and monthly savings were studied. Among the inquired staff members, 89,1% receive their salary through a IPL bank transfer, but only 81,8% start a savings account, in a bank account in the municipality where they work. Figure 51 illustrates staff members' savings.

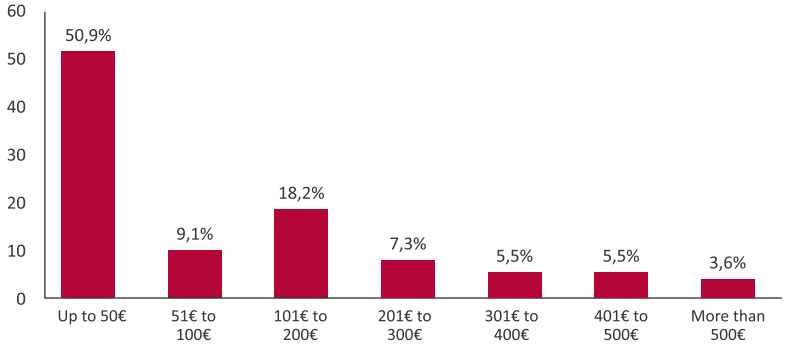


Figure 51. Monthly average savings deposited by staff members in a bank account of the municipality where they work

For most inquired staff members, that savings amount is up to 50 Euros, and 78,2% save at most 200 Euros per month. In the following table, it can be noted that there is an association between the monthly saved amounts and the received monthly income.

Table 20. Association between monthly average savings and monthly average income

	Monthly average income				Total
Monthly average savings	Up to 806 €	From 807 to 1612 €	From 1613 to 2418 €	More than 2419 €	
Less than 50 €	10	24	5	3	42
Between 51 and 100 €	1	7	9	6	23
Between 101and 200 €	0	5	5	1	11
More than 201 €	1	6	5	6	18
Total	12	42	24	16	94

Chi-square=64,829 (p<0,05)

Source: Staff members' online questionnaire.

Besides the analysis of salary deposit and monthly savings, the existence of loans in bank agencies of IPL action municipalities is also an important factor for the region. Concerning the granted loans, it appears that, among the inquired staff members, 65,5% have a loan in a bank agency of the municipality where they work.

The variables associated to the existence of loans are then then examined, their initial amount and also their destination. Figure 52 refers to the amount initially obtained in the loan.

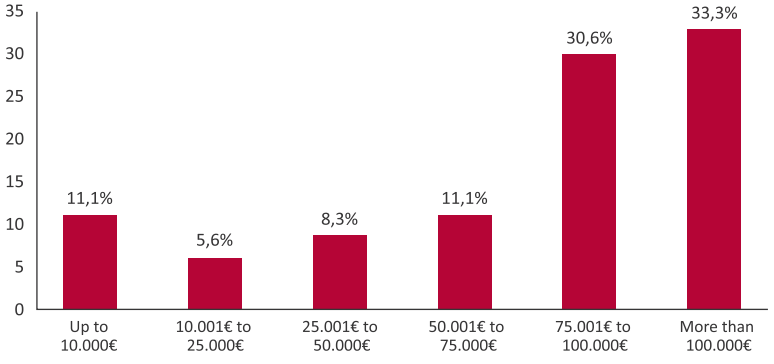


Figure 52. Initial amount of the loans contracted by sample staff members through an account of the municipality where they work

It can be observed that most staff members contracted a bank loan superior to 75.000 Euros.

As be seen in Table 21, from the loans granted by bank institutions, most staff members (47,3%) invested in buying a private house/apartment.

The aim of the obtained loans could be investing in buying private house/apartment, buying house/apartment as real estate investment (namely for renting), in an enterprise or in the purchase of a new car. In this analysis, the answers with zero amount were taken from the sample, for they could alter the results.

Table 21. Summary of the loan values obtained by staff members (in Euros)

	Private house	Rented house	Car
N (%)	26 (47,3%)	2 (3,6%)	19 (34,5%)
Mean	96.896,4	295,0	25.421,0
Median	90.500	295	25.000,0
Minimum	15,0	250	1.000,0
Maximum	250.000	340	100.000

It appears that there are no references to any investments in enterprises or in "others" because no staff member invested in an enterprise of the region. In the construction of this table, the answers that presented zero amount in the respective category were not considered, because it was considered that it means that the loan was not contracted, distorting the actual values.

5.4 SYNTHESIS OF STAFF MEMBERS' ANALYSIS

Staff members are mostly females (70%), with an average age of 40,9 years and on average they have worked for IPL for 12,1 years. In terms of academic qualification, most of them (67,3%) have at least a degree, and 23,6% have complete secondary level.

In 65,4% of the cases, the household comprises 3 or 4 persons and at most there are families with 5 persons. A significant majority of the inquired staff members have children (76,4%), and, in most cases (92,9%), they have 1 or 2 children.

Staff members' household receives a gross average income of 2.268,9 Euros per month and has a total average expense of 1.349,8 Euros per month (with transportation this value rises up to 1.596,2 Euros).

The main expenses of staff members' household are for food, lodging, transportation and other expenses, in descending order of importance. The first three categories focus on 56,0% of the household monthly expenses and, if the housing category is considered according to INE study (housing and current expenses), this value rises up to 62,1% (being much higher than the study value, that is of 42,5%).

It should be pointed out that IPL staff members don't have the expense for housing as the "main concern of family expenses". Food is the main consumer of the household monthly average budget.

Staff members who changed residence contribute, in the form of their visitors' expenses, with 452,8€ per year for the region; however, there were few staff members who changed residence (23,6%).

In terms of banking transactions, they mostly (65,5%) contract loans in bank agencies in the municipality where they work and save on average 128,8 Euros per month. In 47,3% of the cases, the main destination of those loans is permanent private house/apartment, with an average value of 96.896,4€, or buying a car (34,5%), in an average amount of 25.421,0 €. In both cases, this investment was made in the municipality where they work.

In terms of savings, staff members save on average 128,8 Euros per month.

5.5 DIFFERENTIAL ASPECTS BETWEEN TEACHERS AND STAFF MEMBERS

This section comparison is made between teachers and staff members. In order to simplify the comparison, only the observed differences were selected, whether in terms of demographic characteristics or in terms of expenses. Table 22 presents the main differences that were found..

Table 22. Comparison between teachers and staff members

	Teachers	Staff members
Sex: female	46,9%	70%
Average age	36,6 years	40,9 years
Number of years working for IPL	9,9 years	12,1 years
Have children	52,8%	76,4%
The youngest child's average age	7,2 years	12,3 years
Household average expense per month	1.831 euros	1.596,2 euros
Household average gross income per month	3.668,7 euros	2.268,9 euros
Monthly average savings	348 euros	128,8 euros
Do you live in a private house/apartment?	72,2%	83,6%
Investment in the purchase of private house/apartment	109.250,8 euros	96.896,4 euros
Investment in buying a car	32.794 euros	22.539,3 euros

Source: Staff members' and teachers' questionnaires.

Table 22 shows that , in comparison to teachers, there are more staff members with children. This difference can be justified by the age range of staff members (who present an average age of 40,9 years old in comparison to teachers' 36,6 years old), because probably they have formed a family for a longer time and also have already had all the wanted children (since the youngest child's age is 12,1 years old), while teachers still can have more children. This assumption is also supported by the fact that only 52,8% of the teachers have children versus 76,4% of staff members and also because teachers' youngest child's age is much lower (9,9 years old).

Another relevant difference is that 81,1% of staff members' households receive at most gross 3.880 Euros per month, but it should be stressed that 60,0% only get 1.940 Euros. These values are very different from the teachers' ones, for only 7,0% receive at most gross 1.940 Euros per month.

The difference between teachers' and staff members' savings is clear, being salary difference its main cause, while staff members save on average 128,8 Euros per month, in the case of teachers those savings rise up to 348,0 Euros per month.

In comparison to teachers, there is a lower percentage of staff members living in their own house/apartment (83,6% and 72,2% respectively).

In terms of investment, teachers invested amounts 22,2% higher than those of staff members in the purchase of private house/apartment and 19,4% higher than those of staff members in buying a car.

6. IPL STUDENTS

6.1 COMPARING SAMPLE TO POPULATION

The following tables allow to assess the sample representativeness in relation to population, concerning sex, age, school and study area.

Table 23. Comparison between the population and the students' sample per sex

	Population		Sample	
Sex	Frequency	%	Frequency	%
Male	6.285	51,9	193	55,6
Female	5.817	48,1	154	44,4
Total	12.102	100%	347	100%

Chi-square=1,836 (p>0,05)

Fonte: Serviços Académicos do IPL e questionário aos alunos

Table 24. Comparison between the population and the students' sample by age group

	Population		Sample	
Age	Frequency	%	Frequency	%
Up to 20 years	3.706	30,6	97	27,9
21-22 years	2.612	21,6	84	24,2
23-24 years	1.428	11,8	40	11,5
25-26 years	902	7,4	24	6,9
27-30 years	1.134	9,3	39	11,2
More than 30 years	2.320	19,2	63	18,1
Total	12.102	100%	347	100%

Chi-square=3,443 (p>0,05)

Source: IPL Academic Services and students' questionnaire

Table 25. Comparison between the population and the students' sample by the organic unity they attend

	Population		Sample	
Organic Unit	Frequency	%	Frequency	%
ESAD	1.319	10,9	23	6,6
ESECS	1.878	15,5	36	10,4
ESTG	4.010	33,1	88	25,4
ESTM	1.151	9,5	32	9,2
ESSLei	913	7,5	37	10,7
FOR.CET (+M23)	1.723	14,2	63	18,2
INDEA	1.108	9,7	68	19,6
Total	12.102	100%	347	100%

Chi-square=64,573 (p<0,05)

Source: IPL Academic Services and students' questionnaire.

Table 26. Comparison between the population and the students' sample by the course level they attend

	Population		Sample	
Course level	Frequency	%	Frequency	%
1 –Technological Specialization Course[25]	1.723	14,2	63	18,2
2 – University Degree	9.272	76,6	216	62,2
3 – Master's Degree	872	7,2	65	18,7
4 – Post-Graduation/ Specialization	235	1,9	3	0,9
Total	12.102	100%	347	100%

Chi-square= 74,339 (p<0,05)

Source: IPL Academic Services and students' questionnaire.

Table 27. Comparison between the population and the students' sample by study area

	Population		Sample	
Study area	Frequency	%	Frequency	%
1 – Services,Social and Human Sciences	4.711	38,9	119	34,4
2 – Sciences, Engineering and Technologies	4.517	37,3	136	39,3
3 – Health	982	12,5	36	10,4
4 – Economics and Management	1.517	8,1	55	15,9
5- Others[26]	375	3,1	0	0
Total	12.102	100%	346	100

Chi-square= 18,024 (p<0,05)

Source: IPL Academic Services and students' questionnaire.

The Chi-square tests already carried out show that the sample and the population are not totally independent, namely in the variables "course level" and "study area". However, this does not affect sample representativeness.

6.2 PERSONAL CHARACTERIZATION

The students who answered the survey present an average age of 24,9 years old and a median age of 22,0 years old. However, considering only regular students the average age is 21,9 years old(median age: 21,0 years old) and considering only student workers the average age is 29,1 years old (median age: 28,0 years old). The age range is very wide: the youngest student is 18 years old while the oldest student is 56 years old.

Given the initial age distribution, that in the 3rd quartile corresponds to 22 years, the ages were grouped into classes ("Up to 20 years old", "21 and 22 years old", "23 and 24 years old", "25 and 26 years old", "27 to 30 years old", and "more than 30 years old"). The new distribution is in figure 53. It appears that 64,6% are at most 25 years old.

[25] The students who attend the Preparatory Course for over 23-year-olds are included in this category
[26] The students of the Preparatory Course for over 23-year-olds and also of IPL 60+ are in this category

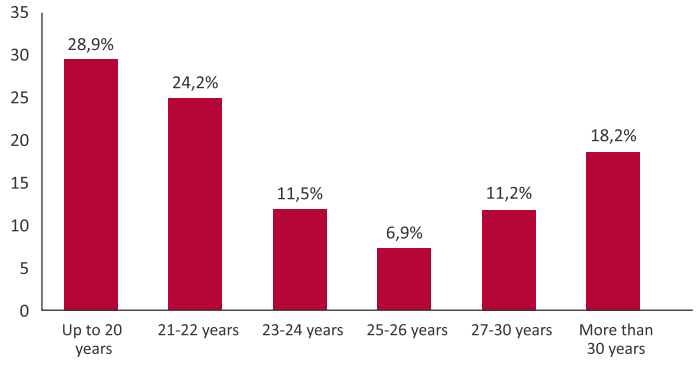


Figure 53. Inquired students' age distribution in classes

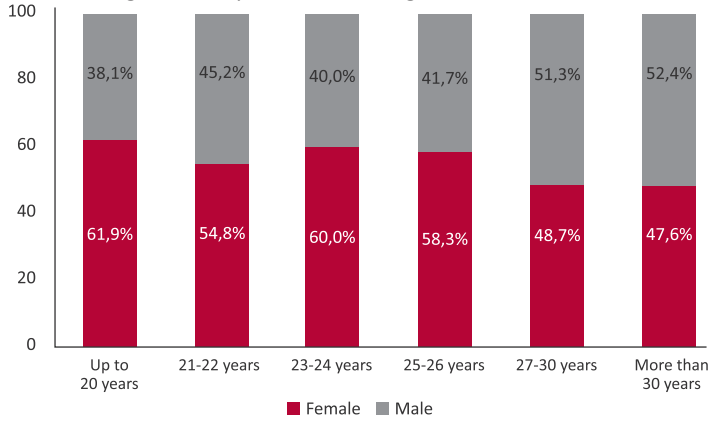


Figure 54. Inquired students' distribution by age class and sex

Figure 54 shows that the youngest students are mostly women and that in the oldest students there is a balance between both sexes, with a greater trend over male students.

The number of years that these students are enrolled in IPL is represented in the following table. This value was obtained through the creation of a new variable, IPL_Years, that was obtained by subtracting the year of students' 1st enrollment from 2012 (the year of the survey).

Table 28. Total of years sample students attend IPL

	Sample	
Number of years	Frequency	%
Less than 1 year[27]	1	0,3
1 year	172	49,6
2 years	86	24,8
3 years	48	13,8
4 years	20	5,8
5 years	12	3,5
6 years	2	0,6
7 years or more	6	0,18
Total	347	100

[27] Students who enter courses which start in the 2nd semester, like nursing and some master's degrees.

On average, sample students have attended IPL for 1,9 years, but it should be stressed that at least they have attended IPL for less than 1 year and at most for 12 years.

Figure 55 represents the distribution of students per total of years that they are enrolled in IPL.

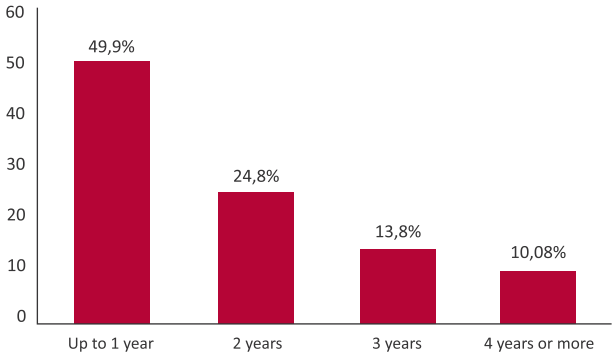


Figure 55. Distribution of sample students per total number of enrollment years

It appears that 74,7% of sample students have been studying in IPL for 1 or 2 years and that 88,5% of the students have been studying there at most for 3 years.

Figure 56 shows the distribution of students per official enrollment year.

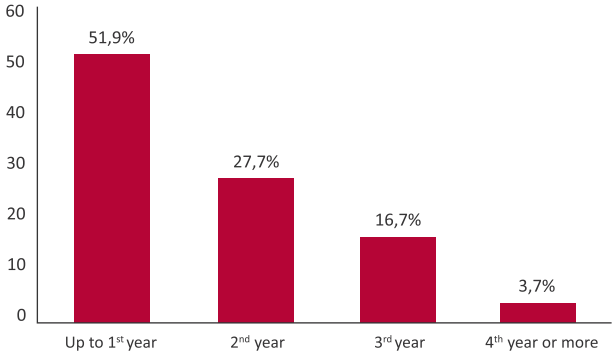


Figure 56. Distribution of sample students per enrollment year

Figure 56 shows that the majority of respondents attend the 1st year officially (51,9%), the remaining students are enrolled in the 2nd year (27,7%) or in the 3rd year (16,7%). However, the students enrolled in the 1st year could be not only of 1st enrollment but also repeat students. This large concentration is due to the fact that students of Technological Specialization Courses (CET), whose duration is 18 months and Master's Degrees, whose duration is 2 years, are included.

Table 29 presents the association between the number of years students attend IPL and the area of study they selected, to determine whether in any of those study areas students stay longer to conclude their study plan or whether the distribution by the different areas is homogeneous.

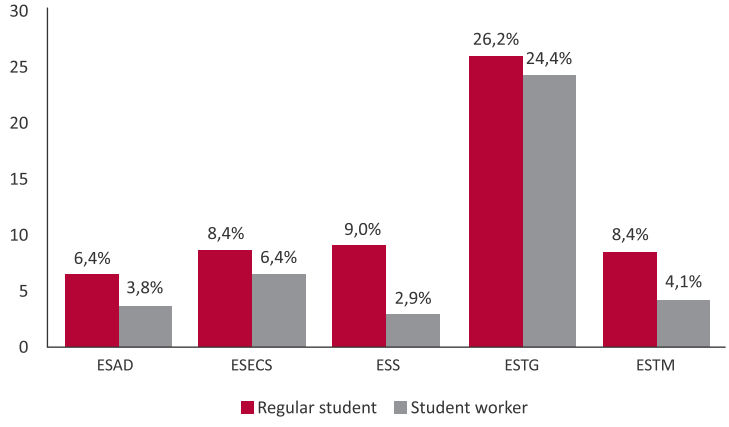
Table 29. Association between study areas and the total of years sample students attend IPL

	Study areas				Total
Total of years attending IPL	SServices, Social and Human Sciences	Sciences, Engineering and Technologies	Health	Economics and Management	
1 year	58	71	19	24	172
2 years	25	33	9	19	86
3 years	17	17	8	6	48
4 years	8	5	4	3	20
5 years	1	5	2	4	12
6 years	0	2	0	0	2
7 years or more	2	2	1	1	6
Total	111	135	43	57	346

Chi-square=17,932 (p>0,05)

Table 29 shows that the number of years students attend IPL and the study area are independent.

The inquired students were asked to identify their institutional status. From the sample, it was determined that 57,9% are regular students and 41,2% are working students and only 25,1% of those have student-worker status. It was analyzed whether there was any difference between schools in what concerns the type of student, that is, if a school could attract more working students than the other ones. Figure 57 presents this analysis.



Chi-square=9,975 (p<0,05)

Figure 57. Sample students' distribution by school and type of student

Analyzing the relationship between the type of student and the school he/she attends, it appears that the variables aren't independent. As it is observed in Figure 57, there is a greater percentage of student workers in ESTG in comparison to the other schools.

When students' distribution by school and age is tested, it appears that the variables aren't independent (X^2=125,603 and p<0,05)), which can be justified by the fact that student workers' average age is higher than that of regular students..

It was also verified that the age of inquired students and the type of student are not independent (X^2=144,747 e p<0,05). As it was expected, student workers are older than regular ones. Students' average age per school is 23,3 years old in ESAD and in ESTM, 24,3 years in ESSLei, 25,5 years old in ESECS and 25,6 years old in ESTG.

Among the inquired students, 97,4% are Portuguese and only 2,6% referred another nationality.

Students' marital status is distributed in this way: almost 82,7% are single, 11,6% are married and all the other situations (separated, divorced, unmarried and widowed) correspond to 5,8% of the cases. Results indicate that 14,1% of the students have children.

It is also possible to characterize the inquired students in regional terms. It is observed that they are mostly from the central region of Portugal, namely from the district of Leiria and also from the surrounding districts, Santarém, Coimbra and Lisbon. Figure 58 illustrates this distribution by the municipalities where IPL is located: 23,1% are from the district of Leiria, 4,3% from Peniche and 5,2% from Caldas da Rainha. Concerning the districts of the students who answered the survey, 31,1% are from the district of Leiria, excluding the municipalities where IPL is located, 11,2% from the district of Santarém and 8,6% from the district of Lisbon.

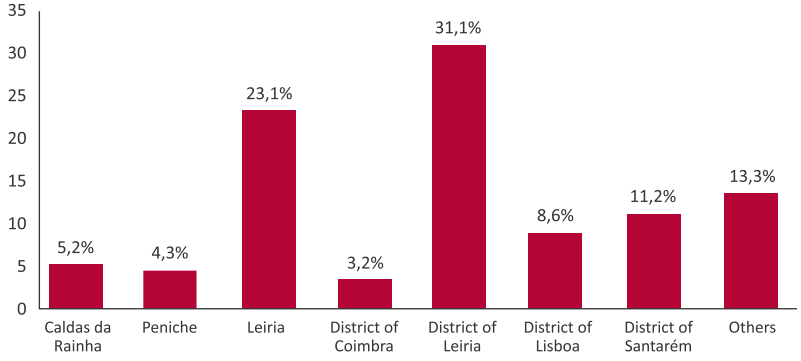


Figure 58. Sample students' distribution by district of residence, before entering IPL

The following figures represent the attractiveness of IPL, through the identification of the distance from students' usual residence (before attending IPL) to the school where they study, the schools in Leiria (figure 59), the school in Caldas da Rainha (figure 60) and the one in Peniche (figure 61).

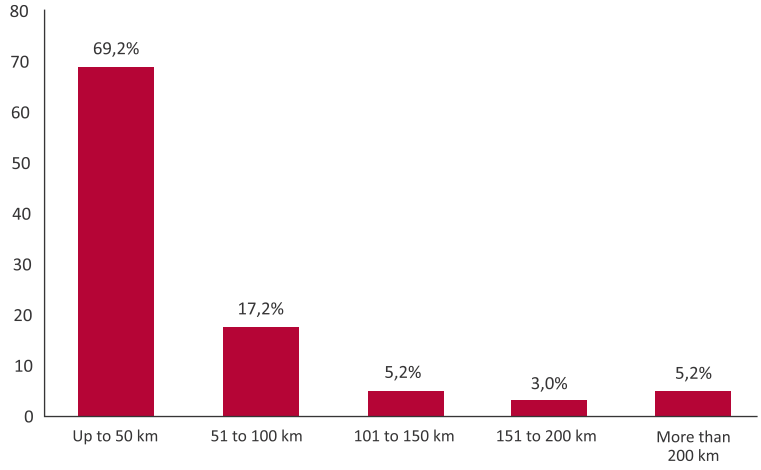


Figure 59. Distance between sample students' usual residence and the schools of Leiria (ESECS , ESSLei and ESTG)

Figure 59 shows that, in the case of the three schools in Leiria, 86,6% of the sample students are from a maximum distance of 100 km, proving that these schools have a considerable influence in a closer area.

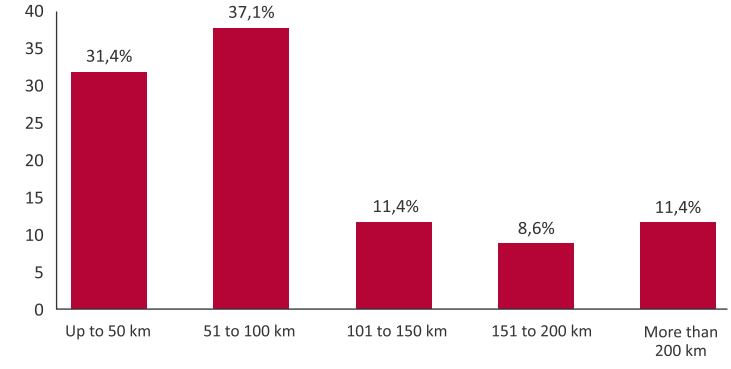


Figure 60. Distance between sample students' usual residence and the school of Caldas da Rainha (ESAD)

In figure 60, it is visible that most inquired students (68,5%) have their usual residence in a maximum distance of 100 km, with 11,4% of those students living more than 200 km from the school where they study.

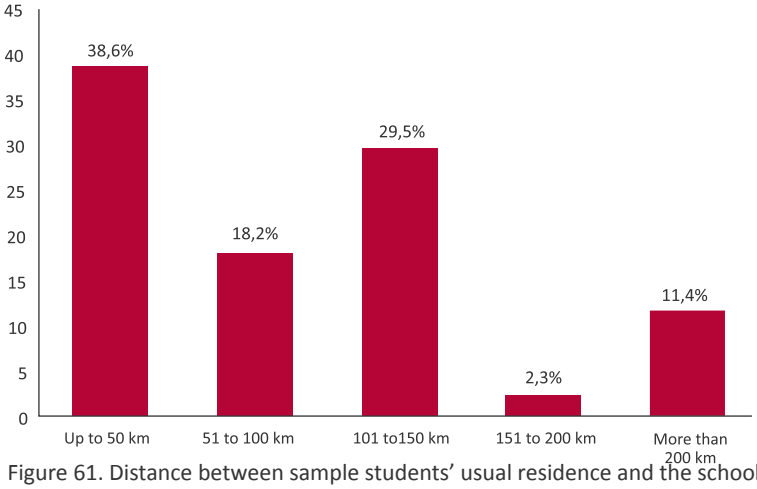


Figure 61. Distance between sample students' usual residence and the school of Peniche (ESTM)

Figure 61 shows that most inquired students in ESTM (56,8%) have their usual residence in a maximum distance of 100 km, with 11,4% of those students living more than 200 km from their residence area.

This way, it can be analyzed that the schools in Caldas da Rainha and Peniche have a higher degree of attractiveness than the schools inLeiria. On average, the students of the school in Caldas da Rainha live in a distance of 91 km; in Peniche students live on average in a distance of 90 km, while students that attend the schools inLeiria live on average in a distance of 53,8 km.

From the above information, given in accordance with table 30, it is possible to characterize IPL area of influence.

Table 30. IPL area of influence

	Less than 50 km	From 50 to 200 km	More than 200 km
Leiria	69,4%	25,4%	5,2%
Caldas da Rainha	31,4%	57,1%	11,4%
Peniche	38,6%	50,0%	11,4%
IPL INFLUENCE	**46,5%**	**44,2%**	**28,0%**

Table 30 shows that IPL the influence of IPL is more significant within a a distance that varies up to 200 km.

These values are more significant if one considers that the Polytechnic Institute of Tomar lies about 50km, the University of Coimbra about 75 km, the Polytechnic Institute of Santarém about 80 km and the different Universities in Lisbon and the University of Aveiro lie about 150 km from IPL.

Figure 62 represents the attendance of students who changed their residence in order to attend the current course.

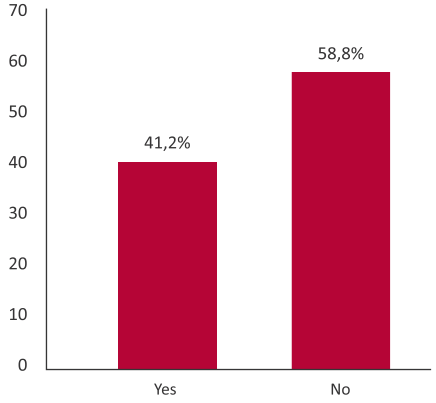


Figure 62. Number of sample students who changed their residence in order to attend the current course

41,2% of students changed their residence in order to attend the current course they're enrolled in. This situation is supported by figure 63 that sets out the main reasons presented by students who changed their residence municipality.

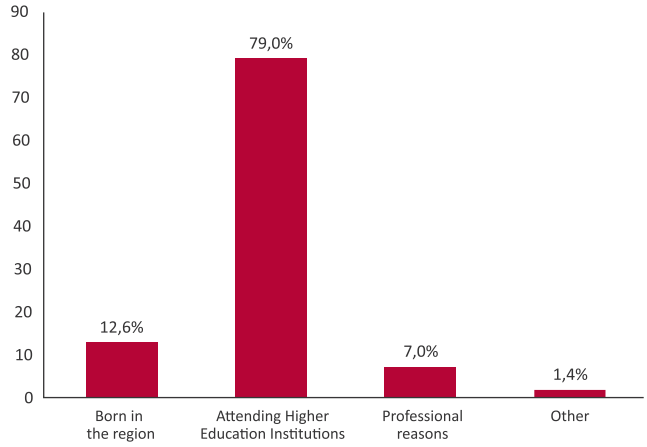


Figure 63. Identification of the main reasons that made students change their residence municipality.

Figure 63 shows that 79,0% of the inquired students changed their residence municipality to attend higher education institutions. There is a clear association between changing residence and attending higher education institutions, that is, students changed their residence in order to attend IPL. This association is confirmed by the test to the two variables – "changed residence" and "the main reason why the student lives in the area" – which indicates that they are not independent (X^2=213,89 e p<0,05).

Furthermore, 83,3% of the inquired students (289 students) have chosen their current course as their 1st option. 75,5% of the students who changed their residence (108 students) chose this course as their 1st option. It should be particularly noted that most inquired students chose the current course as their 1st option, in all study areas.

6.3 SCHOOLING PATH AND CURRENT SCHOOL SITUATION

This section aims at analyzing students' schooling path, namely their route into IPL and also their current situation.

To analyze students' route into IPL, the study considered the inquired students who frequent an undergraduate degree, excluding CET, post-graduations and master's degrees. As represented in Figure 64, in most cases (61,1%) students enter higher education by general quota, through the national entrance examinations. en.

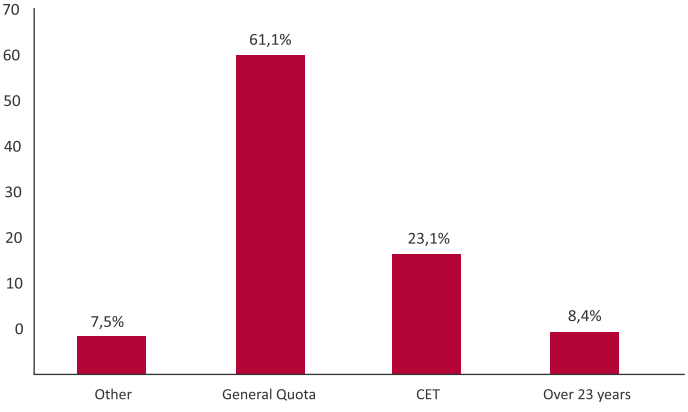


Figure 64. Access way to higher education institutions of sample students who attend a degree.

In table 31 refers to the association between the respondents' age and having/ not having experience/professional training.

Table 31. Association between the existence of experience/training and sample students' age

Existence of previous training/experience?	Age in classes						Total
	Up to 20 years	21 or 22 years	23 or 24 years	25 or 26 years	27 to 30 years	More than 30 years	
Yes	42	29	19	18	30	60	198
No	55	55	21	6	9	3	149
Total	97	84	40	24	39	63	347

Chi-square=85,846 (p<0,05)

Through the analysis of students' age, it seems the two variables – *having previous training/experience and age in classes* – are not independent. This can be justified by the fact that the oldest students, possibly with student – worker status, already had a professional activity. Among the inquired students about 57,1% attended training courses or had a professional activity before accessing higher education.

Among the inquired students, 57,9% see themselves as students (regular students); 41,2% are student-workers and among these 16,1% have no status.

Figure 65 illustrates the distribution of these students according to their professional situation.

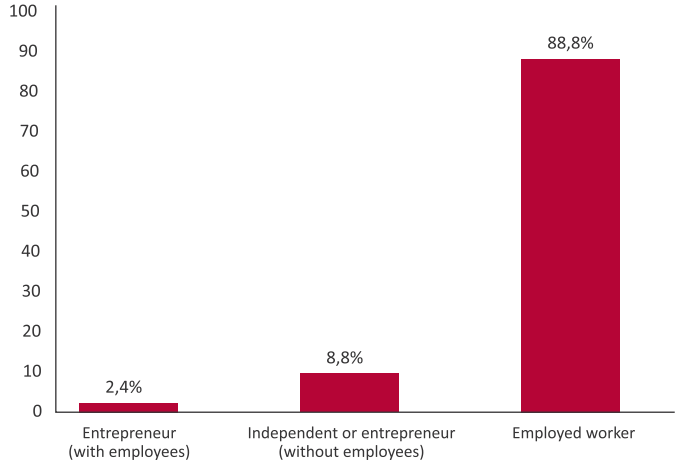


Figure 65. Professional situation of students with a professional activity

Among the inquired students who really have a professional situation, 88,8% are employees, while the remaining 11,2% are self-employed. Some inquired students chose the option "other" in their professional situation; these students were excluded from this analysis as they are unemployed workers.

It seems that there is no independence between the type of student and the existence of a professional situation (X^2=279,967 and p<0,05). However, this association was already predictable because only the individuals who prove their professional situation, namely by registering for Social Security, fit into the student-worker status.

The students who have a professional activity are mostly the ones that already had some professional experience or training before entering higher education (X^2=68,715 and p<0,05).

Figure 66 presents the number of hours per week student workers spend on their professional activity.

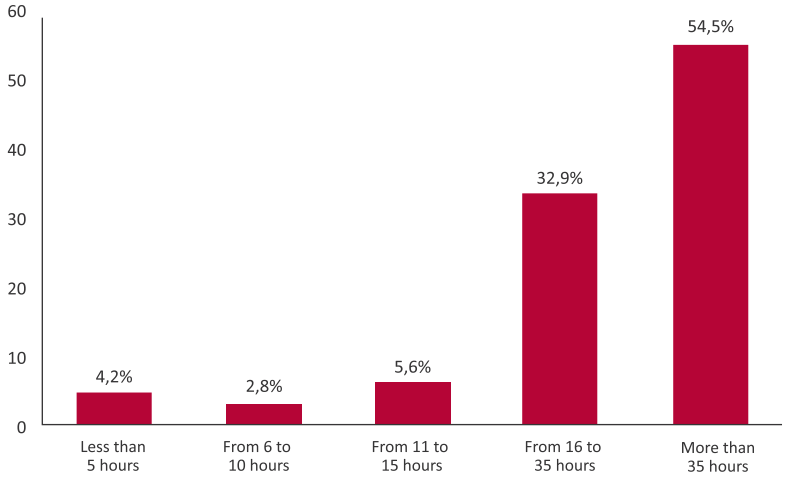


Figure 66. Student-workers' number of work hours per week

Figure 66 indicates that student workers mostly work more than 35 hours per week. In fact, 54,5% state that they work more than 34 hours per week and 32,9% more than 16 hours per week.

These students (student-workers) classified the relationship between professional situation and course adequacy as described in Figure 67.

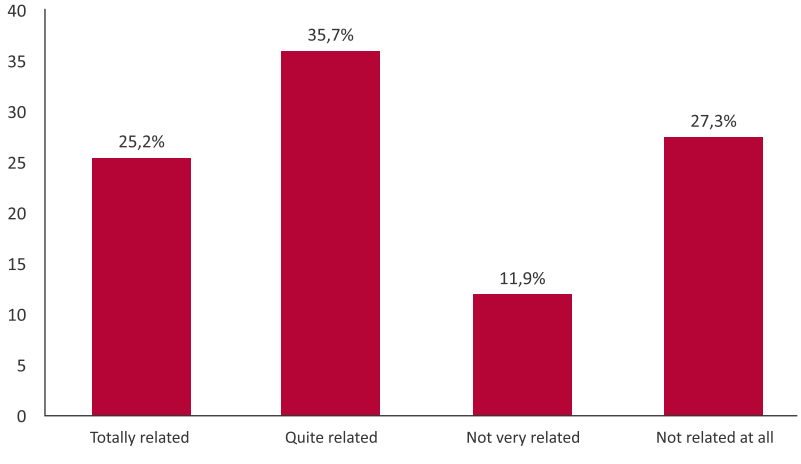
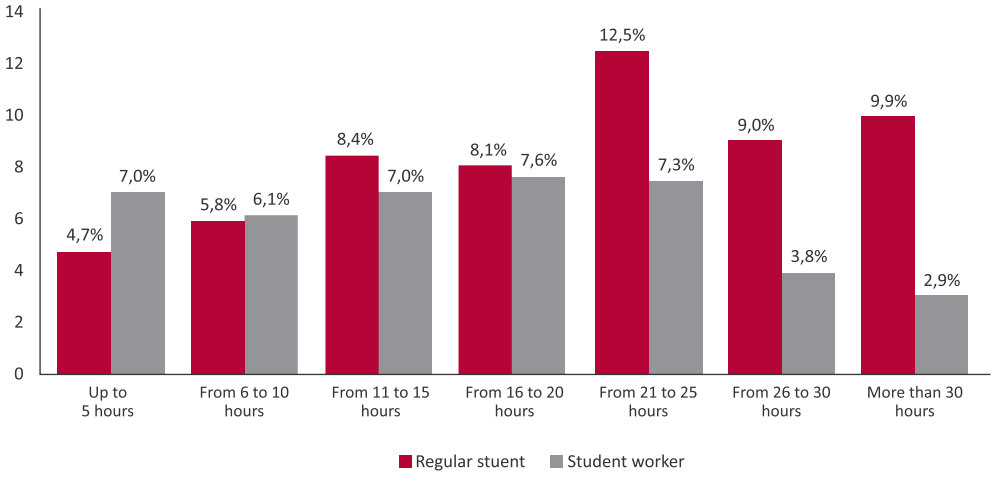


Figure 67. Relationship between profession and current course

Analyzing this figure, it is clear that most students who have a job (60,9%) really have jobs that are highly related to the courses they attend, but 27,3% student-workers have jobs that are not really related to their courses.

Concerning the number of hours attended weekly, it appears that this value is not independent from the fact of being a regular student or a student worker. As it can be seen in Figure 68, the latter attend fewer classes than regular students.

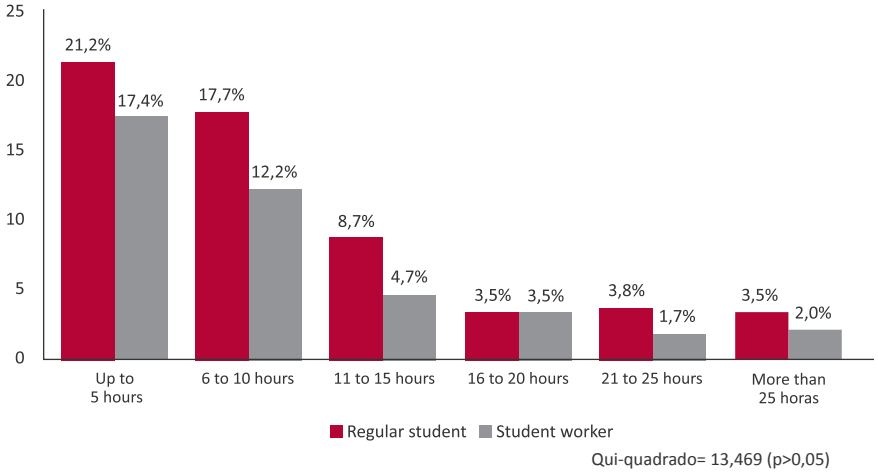


Chi-square= 29,844 (p<0,05)

Figure 68. Comparison between the number of contact hours attended weekly by regular students and student workers

Analyzing Figure 68 it can be verified that student workers attend fewer contact hours per week. However, as most of these students work more than 34 hours per week being employees, it is reasonable that they cannot attend many class hours. In the first two categories, it is clear that there are more student-workers attending classes up to 10 hours per week than regular students; this is probably due to the fact that these student-workers are attending their courses on a part-time basis.

The study also analyzed the number of weekly hours students spent studying outside the classroom. Figure 69 presents the distribution of the number of weekly study hours by type of student.



Qui-quadrado= 13,469 (p>0,05)

Figure 69. Comparison between the number of weekly study hours of both regular students and student workers.

68,5% of students study less than 11 hours per week. It is clear, and expected, that regular students study more hours per week than student workers. It appears that this variable is independent from the type of student.

6.4. FAMILY CHARACTERIZATION

According to DGES work (Martins, Mauritti and Costa, 2005: 33) the characterization of students' social origin is an important factor in determining their living conditions and economic resources, and *"one of the most productive indicators in the analysis of students' socio-economic contexts relates, precisely, to their parents' labour status."*

In this context, the study tried to characterize the situation of the parents situation. Figures 70 and 71 present the distribution of the inquired students' mothers and fathers in their professional situations.

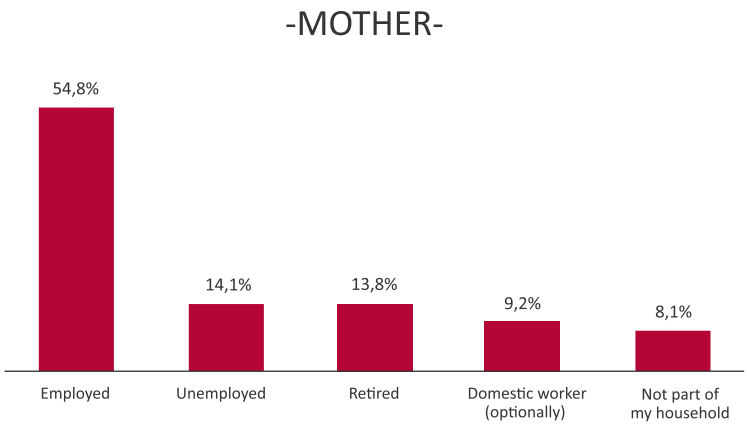


Figure 70. The inquired students' mother's professional situation

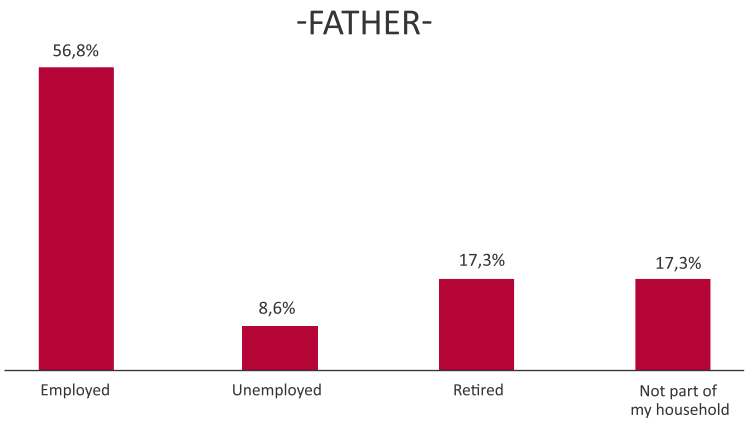


Figure 71. The inquired students' father's professional situation

In Figures 70 and 71 it is observed that in most students' families at least one parent is employed, specifically, 54,8% of the mothers and 56,8% of the fathers. However, only about 36,6% of the students have got employed parents, which means that in 63,4% of the inquired students' families only one parent has got a job.

Unemployment is more significant in relation to the mothers than that of the fathers (14,1% and 8,6%, respectively); 9,2% of the inquired students identified their mother's professional category as domestic worker -by choice and without being remunerated.

As there are more employed fathers, it is understandable that there is a greater percentage of retired fathers in comparison to retired mothers (together with the fact that, as it isn't a formally considered professional category, a domestic worker never reaches retirement).

Another fact is that many students do not share their household with parents; this is because they formed their own household or they are half-orphans (with one living parent); this happens at a higher rate with fathers (17,3%) than with mothers (8,1%).

A comparison is also made between the professional category of parents of students who are part of their own household and the employed Portuguese population. It was tested whether the collected sample was significantly different from the Portuguese population employed in the 2nd semester of 2011. Table 32 refers to students' mothers while Table 33 refers to students' fathers.

Table 32. Comparison between students' mother's professional situation and the Portuguese employed female population

	Sample		**Portuguese population**	
Professions	Frequency	%	Frequency (in thousands)	%
Armed Forces Member	-	-	3,2	0,2
Senior, Public Administration and Business Management	10	5,1	38,4	2,0
Special Intellectual and Scientific Professions	12	6,2	359,6	19,1
Intermediate Technicians and Professionals	14	7,2	160,9	8,6
Administrative staff and similar workers	32	16,4	252,6	13,4
Service and Sales workers	37	19,0	420,1	22,4
Farmers and skilled agricultural and fishery workers	3	1,5	18,5	1,0
Craft and related trade workers	19	9,7	109,1	5,8
Instrument and machine operators and assembly workers	8	4,1	115,8	6,2
Unskilled workers	48	24,6	400,0	21,3
Domestic worker	12	6,2	1.878,4	100,0
Total	195	100,0	3,2	0,2

Chi-square= 202,993 ($p<0,05$)

Fonte: Questionário aos alunos e INE (2012).

The result of the Chi-square test shows that there are some differences between the distribution of the variables (table 33). Mothers' most represented professional category is that of *"Unskilled workers"* with 24,6. The category *"Armed Forces Member"* isn't represented.

Table 33 presents the number of fathers who belong to each of the considered professional categories and also the Portuguese male population employed in the 2nd semester of 2011.

Table 33. Comparison between students' fathers' professional situation and the Portuguese male employed population's professional situation

	Sample		Portuguese population	
Professions	Frequency	%	Frequency (in thousands)	%
Armed Forces Member	6	3,6	28,5	1,5
Senior, Public Administration and Business Management	11	6,5	77,0	4,0
Special Intellectual and Scientific Professions	7	4,2	239,8	12,4
Intermediate Technicians and Professionals	29	17,3	223,0	11,5
Administrative staff and similar workers	17	10,1	138,7	7,2
Service and Sales workers	25	14,9	240,5	12,4
Farmers and skilled agricultural and fishery workers	3	1,8	55,1	2,8
Craft and related trade workers	20	11,9	520,1	26,9
Instrument and machine operators and assembly workers	18	10,7	273,1	14,1
Unskilled workers	25	14,9	141,0	7,3
Menial worker	7	4,2	1.936,8	100,0
Total	168	100,0	28,5	1,5

Chi-square= 224,977 (P<0,05)

Source: Student's questionnaire and INE (2012).

In table 33 shows that there are some differences between sample students' fathers' professional situation and the Portuguese population's one.

At the level of the sample, the most represented professional category is the one of *"Intermediate Technicians and Professionals"* with 17,3%, followed by the categories *"Unskilled workers"* and *"Service and Sales workers"*, both with 14,9%. The least represented category is the one of "Farmers and skilled agricultural and fishery workers" with 1,8%.

Concerning students' parents, it was possible to analyze their schooling level, for the students whose parents are part of their household. Table 34 describes the schooling levels of sample students' parents.

Table 34. Characterization of students' parents' schooling

	Mother's schooling		Father's schooling	
Schooling level	Frequency	%	Frequency	%
Basic Education st cycle	98	29,6	101	33,0
Basic Education 2nd cycle	49	14,8	60	19,6
Basic Education 3rd cycle	78	23,6	59	19,3
Secondary Education	77	23,3	61	19,9
Degree	20	6,0	16	5,2
Post graduation	5	1,5	2	0,7
Master's degree	1	0,3	4	1,3
Doctoral level	3	0,9	3	1,0
Total	331	100,0	306	100,0

In the collected sample, represented in Table 35, there are major differences between students' fathers' and mothers' complete schooling level (X^2=433,633 e p<0,05). There are fewer mothers only with 1st cycle of Basic Education and there are more mothers with 2nd or 3rd cycle of Basic Education and with a degree, in comparison to fathers.

The variable schooling _household has been created through the analysis of the household schooling level. This variable only considered the highest complete level between the father and the mother. In cases where only one of them is identified, that was considered as the highest level. Afterwards, these values were compared with the ones of the Portuguese working population registered in 2012, in order to identify possible differences (Table 35).

Table 35. Comparison between students' household maximum schooling and the Portuguese working population's maximum schooling

	Sample		Portuguese population	
Schooling level	Frequency	%	Continent (in thousands)	%
No level [a]	-	-	180,2	20,0%
Basic Education (1st, 2nd and 3rd cycles)	202	60,3	3.055	57,5%
Secondary Education	92	27,5	1.190	22,4%
Higher Education [b]	41	12,2	1.070	20,1%
Total	335	100,0	5.315	100,0

Chi-square=13,993 (p<0,05)

[a] This level wasn't considered in the survey; so, it was deleted from the population.
[b] The level Higher Education included the two categories "degree" and "post-graduation" considered in the survey, in order to make the comparison possible.

Source: Students' questionnaire and PORDATA
(accessed on March 11 2013, available in www.pordata.pt).

This Chi-square test shows that the sample presents some differences concerning the Portuguese continental population. The schooling levels that present the biggest differences are: the secondary education level, that is quite overrepresented in the sample (27,5%) and higher education level, that is underrepresented (12,2%), compared with the population's values.

Figure 72 presents the distribution of students' parents' maximum schooling by the different school levels

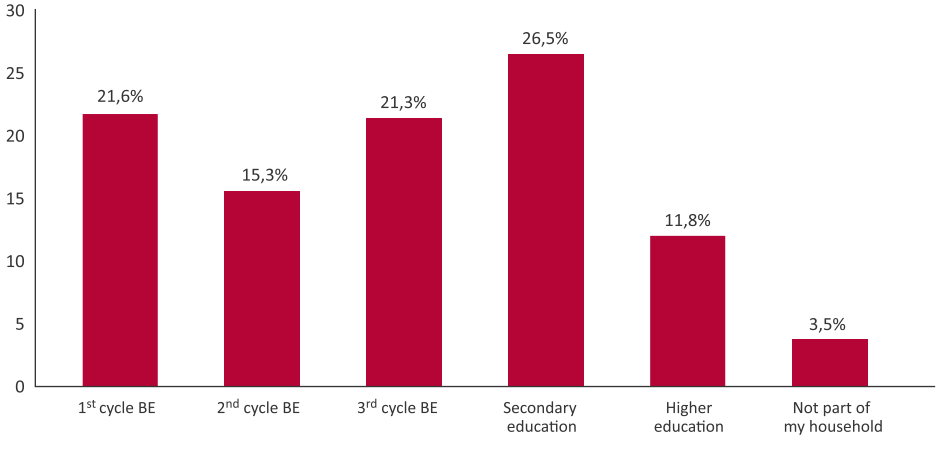


Figure 72. The inquired students' household maximum schooling

It appears that there is an increase in the percentage of all schooling levels, except for the level "basic education level 1" that decreased significantly. Although DGES study (Martins, Mauritti & Costa, 2005) presents polytechnic higher education as the one that recruits on the largest scale among the lowest social classes/strata, with 63,0% of families of origin with only level 1 of basic education, it appears that in the case of IPL that value does not exceed 21,6%. Still in the referred study, the total of basic education is about 81,0% of households, while in this case it does not exceed 60%.

Another relevant aspect is the household's monthly gross income, illustrated in Figure 73.

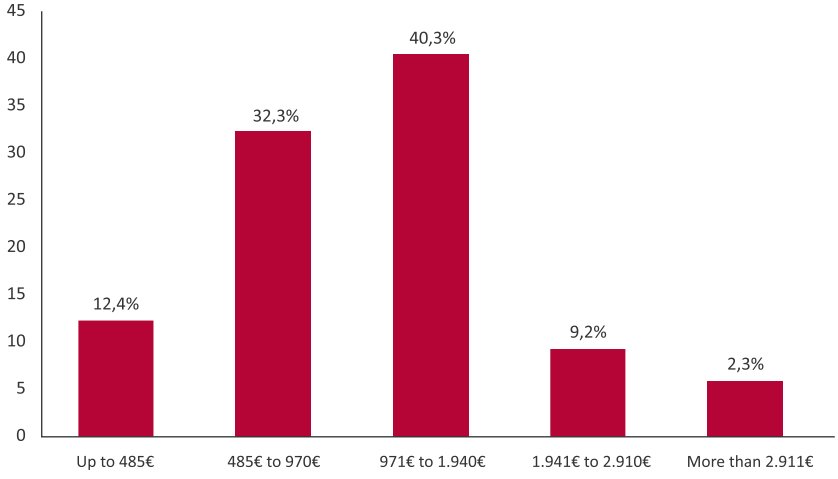


Figure 73. Characterization of students' household monthly average income

In Figure 73 it appears that about 44,7% of the inquired students belong to families that receive at most 970 Euros per month, that is, two national minimum salaries. However, 85,0% of the inquired students belong to a household that earns less than 1.940 Euros per month. Another less significant layer is the one of 1.941 to 2.910 Euros per month (that corresponds to 9,2% of the inquired students) and, above that value, there is a reduced percentage of students (only 2,3% of students belong to a family with an income higher than 2.911 Euros per month).

6.5. LIVING CONDITIONS

In this part, the study characterizes students' living conditions during school time. Students' available budget can come from different sources: family, state support (in the form of subsidy, loan or school grant), non-state support, self-employment income or other sources. The budget available from the source *"family"* refers to the values that the family of origin, or the constituted family, make available per month. The budget available from the source *"state support"* may arise in three possible ways: subsidy, when it refers to a value assigned by public organizations under specific programs (e.g. subsidies given by some city councils to higher education students); loan, when students resort to loans through institutional programs; and school grant, when the monthly amount is assigned by the higher education institution[28].

[28] The payment of the school grant is made in ten installments, directly to the student, through bank transfer to the bank account specified by the student (Article 54.º Order n.º 8442-A/2012, of June 22, 2012)

The *"non-state support"* refers to values received monthly from non-public institutions, such as private institutions (e.g. banks) that award school grants. The "self-employment income" refers to the amount received monthly, resulting from students' work.

The available budgets are presented in accordance with their source. It is worth noting that the students, who in the different sources referred the value zero Euros, weren't analyzed, since their inclusion would alter the data.
The first described budget is the amount that the family of origin or the constituted family can afford (Figure 74).

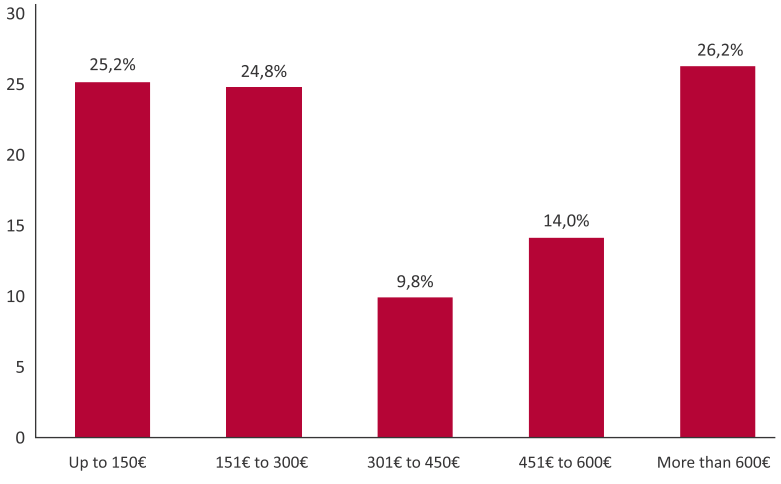


Figure 74. Distribution of the monthly average value made available to the students by family

Figure 74 characterizes the distribution of the 214 students, who referred family as one of their financing sources. Most of these students (59,8%) have less than 451 Euros available per month.

Figure 75 represents the budget received monthly through state non-repayable subsidies.

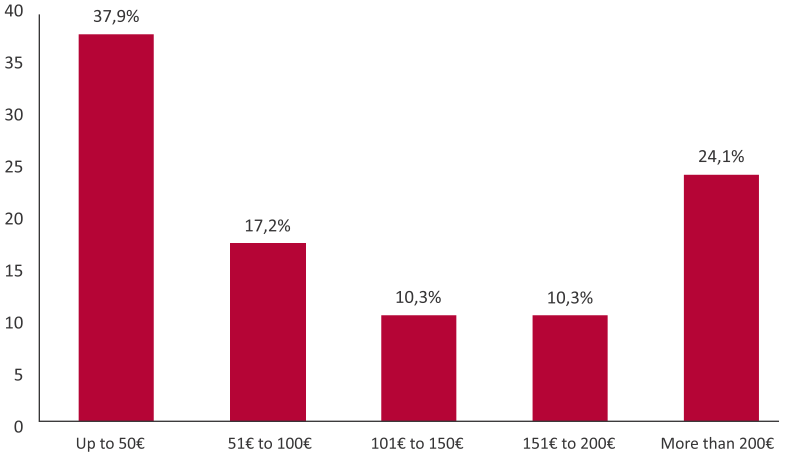


Figure 75. Distribution of state non-repayable subsidy awarded to students per month

Figure 75 presents the 29 students who receive state support in the form of a non-repayable subsidy; 37,9% of these students receive less than 51 Euros per month. The last category, the one of students who receive more than 200 Euros, should also be considered, representing 24,1% of the inquired students.

In Figure 76, it is shown the distribution of students who receive some help in the form of a non-repayable school grant, in the different value classes.

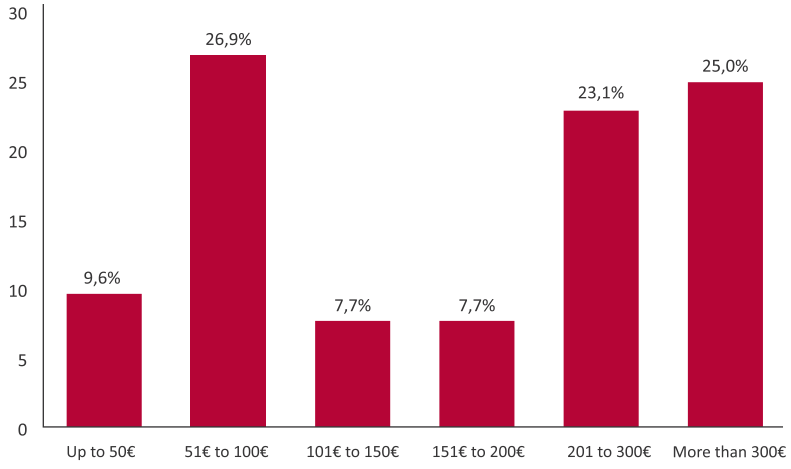


Figure 76. Characterization of the non-repayable school grant awarded to students monthly

Figure 76 shows that 36,5% of the 52 students who are awarded a non-repayable school grant receive at most 100 Euros. The average value of the school grants awarded to the students is 309,8 Euros.

Figure 77 presents the distribution of the amount available per month, resulting from the students' work.

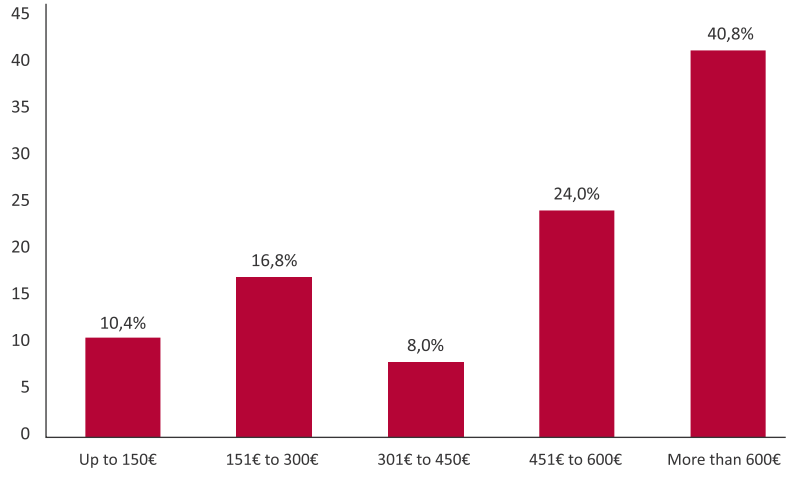


Figure 77. Characterization of the amount available per month, resulting from students' work

The distribution presented in figure 77 shows that the students who receive an income resulting from their own work, have in 40,8% of the cases a monthly budget superior to 600 Euros.

Some students identified other income sources, mostly family sources or unemployment benefit.

The available monthly amounts resulting from the seven identified sources are summarized in the following table.

Table 36. Summary of the students' available income per source (in Euros)

		Family	Subsidy	Loan	School grant	Non-state institutions	Work	Other sources
N		215	29	5	52	5	125	11
Mean		674,2	174,7	172,4	309,8	84,4	1160,4	271,9
Median		300,0	100,0	50,0	176,5	80,0	575,0	200,0
Percentile	25	150,0	30,5	1,0	100,0	1,0	300,0	100,0
	75	650,0	250,0	405,0	312,7	170,0	1000,0	500,0

Table 36 shows that IPL students who have the highest amount available are those who already have a job (with an average value of 1160,4 Euros), followed by those who have some support from the family of origin or from their own family, whose average value rises up to 674,2 Euros. The other sources vary between 84,4 Euros from non-state institutions (the lowest income) and 309,8 Euros of the school grant. The following analysis investigates whether the income available by the family can vary according to students' age (tTable 38). It appears that there is an association between these two variables.

Table 37. Crossing between budget made available by family and students' age

	Students' age (in classes)						Total
Budget made available by family	Up to 20 years	21 to 22 years	23 to 24 years	25 to 26 years	27 to 30 years	More than 30 years	
Up to 150 Euros	26	14	8	2	2	2	54
From 151 to 300 Euros	24	20	5	4	0	0	53
From 301 to 450 Euros	9	7	3	1	1	0	21
From 451 to 600 Euros	7	10	2	1	3	7	30
More than 600 Euros	14	9	5	4	7	17	56
Total	80	60	23	12	13	26	214

Chi-square=53,759 ($p<0,05$)

According to these data, the oldest students receive the highest family contributions; This is probably due to the fact that those students have already formed a family.

It would be possible to relate the value resulting from students' work to their age, but, as it was already referred, the oldest students themselves have a professional income . Therefore, it is expected that oldest students are also the ones who have the highest monthly value available.

From the various sources that are funding students, it appears that family is the major contributor to most students' maintenance (61,9%) during school time. However, there are many students who are being funded by multiple sources. The most common situation is the one in which students are being helped by their family and also receiving a school grant, but it cannot be stated that there is an association between these two variables.

The following table relates family contribution (which appears to be the highest one) and the type of accommodation during school time (table 38).

Table 38. Relationship between the amount available by family and the type of accommodation

	Type of accommodation						Total
Amount available by family	Individual rented room	Shared rented room	Students' residence	Parents'/ Relatives' house	House/ Students' apartment	Other	
Up to 150€	11	3	5	29	1	5	54
From 151€ to 300€	17	3	5	21	1	6	53
From 301€ to 450€	14	1	0	2	0	4	21
From 451€ to 600€	9	1	1	7	8	4	30
More than 600€	7	1	5	16	19	8	56
Total	58	9	16	75	29	27	214

Chi-square=69,675 (p<0,05)

It appears that the two variables are not independent. Based on the table, it can be stated that the students who are living in their own house receive more from their own family, probably because their family can have a higher monthly income or the students have already constituted their own family.

The evaluation of welfare conditions can be analyzed in Figure 78.

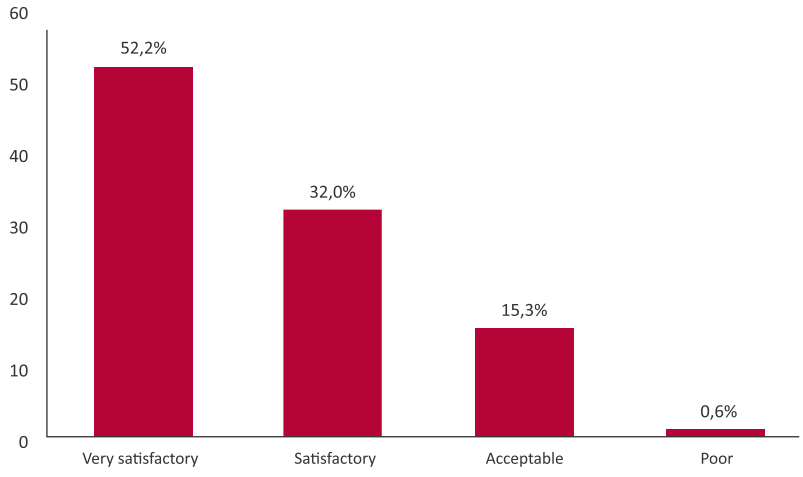


Figure 78. Housing conditions

Most inquired students assess their housing conditions in a positive way, since 84,2% of the students consider their conditions satisfactory or very satisfactory and only 0,6% of the students consider that they have bad conditions. The students who consider that they have bad conditions live in students' residences and individual rented rooms.

6.6 CONSUMPTION PATTERNS AND SOCIAL PRACTICES

In this part, students were asked to identify their monthly expenses per categories that could be housing, school material, health, leisure, personal goods, IT material, fees and taxes and other expenses.

Among the previously identified categories of monthly expenses, the first to be analyzed is the housing cost (Figure 79).

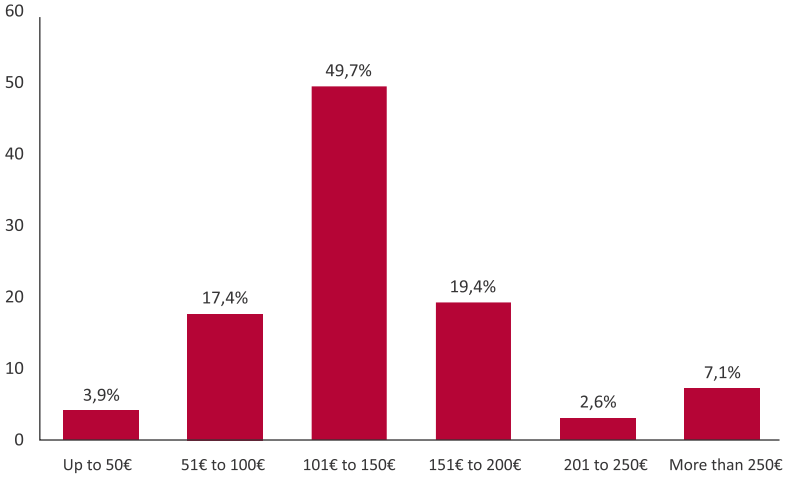


Figure 79. Monthly average value spent by the inquired students on accommodation

Most students (67,1%) spend between 51 and 150 Euros.

The present study also analyzes whether students select their accommodation in accordance with their household income (Table 39).

Table 39. Relationship between the amount made available by family and the type of accommodation

	Type of accommodation						Total
Household income	Individual rented room	Shared rented room	Students' residence	Parents'/ relatives' house	Private house/ apartment	Rented house/ apartment	
Up to 485€	11	2	3	13	7	7	43
486€ to 970€	22	2	9	43	16	20	112
971€ to 1.940€	30	7	8	59	23	13	140
1.941€ to 2.910€	8	0	1	7	10	6	32
2.911€ to 3.880€	3	1	0	1	2	1	8
3.881€ to 4.850€	2	0	0	1	1	0	4
4.851€ to 5.820€	0	0	0	2	1	0	3
More than 5.820€	0	1	0	1	2	1	5
Total	76	13	21	127	62	48	347

(The conditions for the Chi-square test aren't fulfilled)

Table 39 shows the distribution of the observed frequencies of family income echelons in relation to the type of accommodation. Most students, in all income categories, prefer “parents’/relatives’ house”; the students, who belong to gradually higher income categories , prefer as second option “private housing” or “rented housing”.

The next category under study refers to food expenses (figure 80).

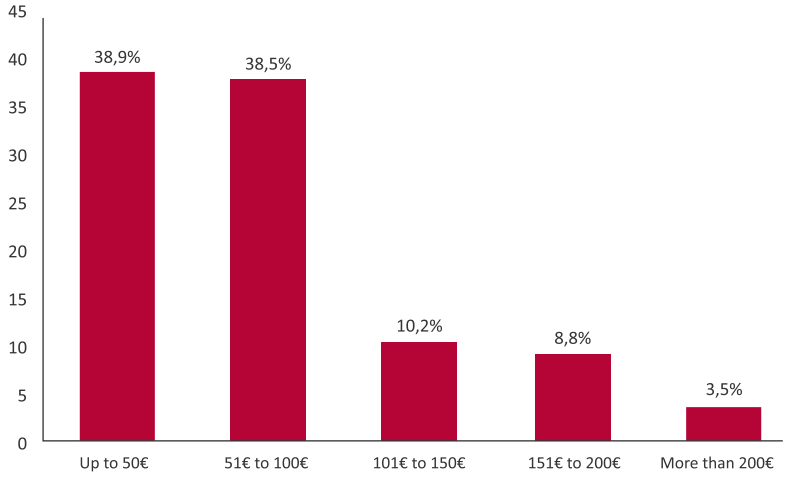


Figure 80. Monthly average value spent on food by the inquired students

Figure 80 shows the distribution of food expenses made by students. Most students (77,4%) spend up to 100 Euros per month and 38,9% of students spend up to 50 Euros.

The next expense category to be analyzed focuses on school material expenses and it is represented in Figure 81.

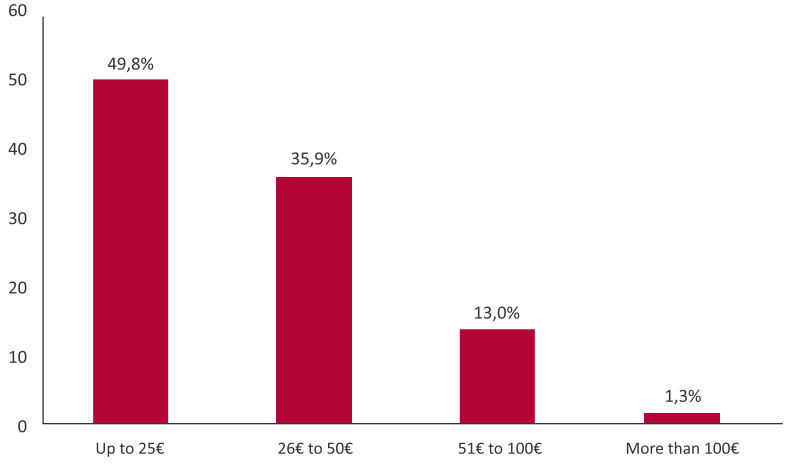


Figure 81. Monthly average value spent on school material by the inquired students

In this category, most students (almost 50%) spend up to 25 Euros per month and 85,7% spend up to 50 Euros on school material, per month.

Figure 82 presents health expenses. The fact that most students (65,0%) spend up to 25 Euros is adequate to students’ average age.

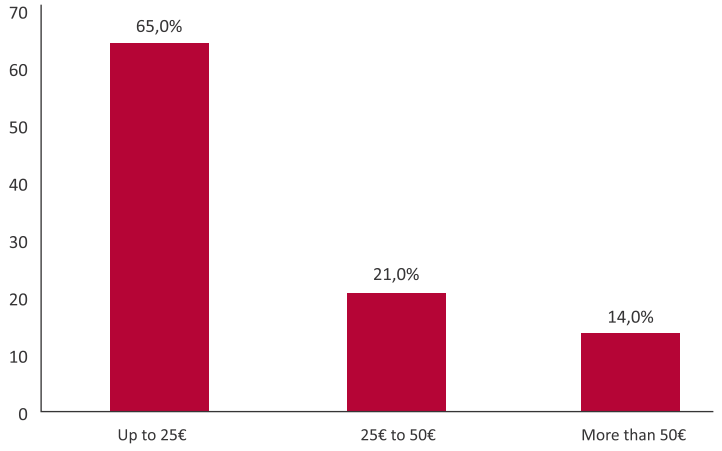


Figure 82. Monthly average value spent by the inquired students on health

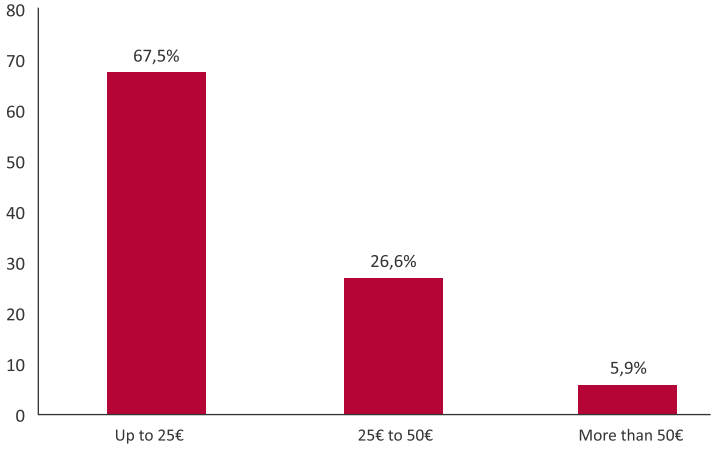


Figure 83. Monthly average value spent by the inquired students on leisure

In Figure 83 most students spend up to 25 Euros. Possibly students only consider the expenses for cinema tickets, books, etc., as it was suggested in the question, and they did not consider, for example, going out at night, alcoholic drinks, coffee or cigarettes.

Figure 84 illustrates students' expenses for personal goods.

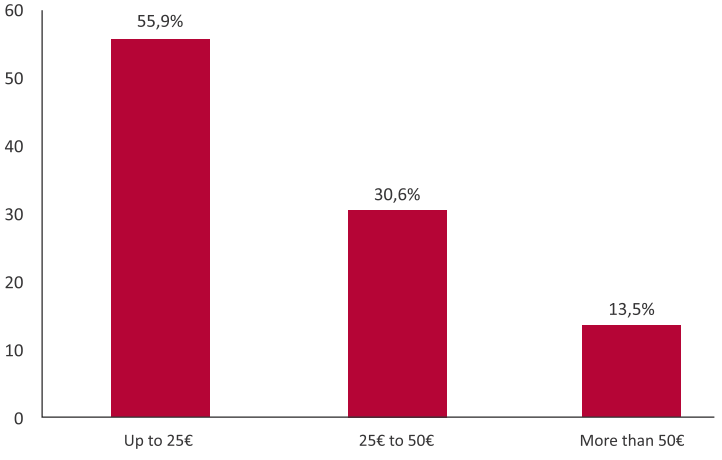


Figure 84. Monthly average value spent by the inquired students on personal goods

Most students spend up to 25 Euros per month on personal goods (hygiene products, clothes, etc.).

In the category of expenses for IP material, 93,6% of the students spend up to 50 Euros and it appears that 71,7% of the students spend at most 100 Euros per month on fees and taxes.

In the category of monthly expenses, students were also asked to estimate the value their families spend monthly on intangible goods like, for example, food, goods they bring from home or tickets bought by their families (Figure 85).

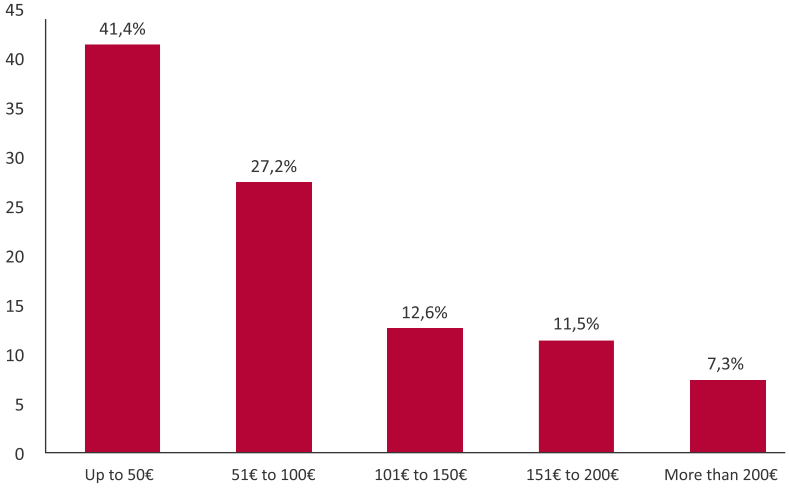


Figure 85. Monthly average value spent by the inquired students' families on intangible goods

In this category, 55% of the students considered that there were some family expenses for those goods, whose monthly average value would be 104,8 Euros.

Table 40 presents a summary of the expenses in the different categories and in accordance with the various accommodation possibilities. In this table, the surveys that referred zero Euros expenses in the different options were eliminated, because it was considered that they could alter the results.

Table 40. Summary of students' monthly average expenses by type of accommodation (in Euros)

	Individual room	N (76)	Shared room	N (13)	Students' residence	N (21)	Parents/ relatives' house	N (127)	Private house/ apartment	N (63)	Rented house/ apartment	N (45)
Intangible goods	109,5	59	108,8	9	143,1	19	103,2	56	83,3	19	86,3	29
Accommodation	147,1	71	135,3	13	93,2	18	130,1	6	325,4	10	161,3	38
Food	101,9	70	99,2	13	98,8	20	73,5	89	100,4	49	91,9	43
School material	42,3	60	30,0	10	32,1	17	35,9	72	30,2	39	34,2	33
Health	32,0	31	51,6	6	18,8	9	37,6	28	37,2	11	22,7	17
Leisure	22,9	55	18,0	10	18,5	17	28,2	49	30,1	8	28,0	33
Personal goods	24,7	58	33,5	12	20,3	15	42,8	47	79,6	16	39,5	24
IP material	19,3	40	17,5	8	50,4	11	28,4	36	40,8	24	26,3	25
Tuition fees	124,2	70	118,3	12	178,0	20	97,9	106	351,0	54	112,0	45
Others	70,5	20	36,6	3	49,3	6	113,4	25	121,6	13	89,0	11
Total expenses	**456,4**	**76**	**454,8**	**13**	**449,6**	**21**	**225,2**	**127**	**527,2**	**63**	**425,4**	**45**
Total of expenses + Intangible goods	541,4	76	530,2	13	579,1	21	270,7	127	553,1	63	478,8	45

Students also present some expenses for transportation. These expenses could be referred having in mind two perspectives: those students who have private transportation and the ones who have no private transportation. The latter could declare some transportation expenses between their residence and school and also between their residence and their family house during school time.

Most inquired students (49,3%) travel up to 5 km between their residence and the school they attend during the school time.

63,7% of the inquired students travel in private transportation, 23,6% go on foot, 10,7% take public transportation and 2,0% refer another situation.

The students who have no private transportation were asked to estimate the value spent on commuting between their residence and the school they attend and also between their residence and their family house. Concerning the former situation, 84,1% of the students spend up to 50 Euros; the latter, the situation referring to the expenses for commuting between the students' residence and their family house, is illustrated in Figure 86.

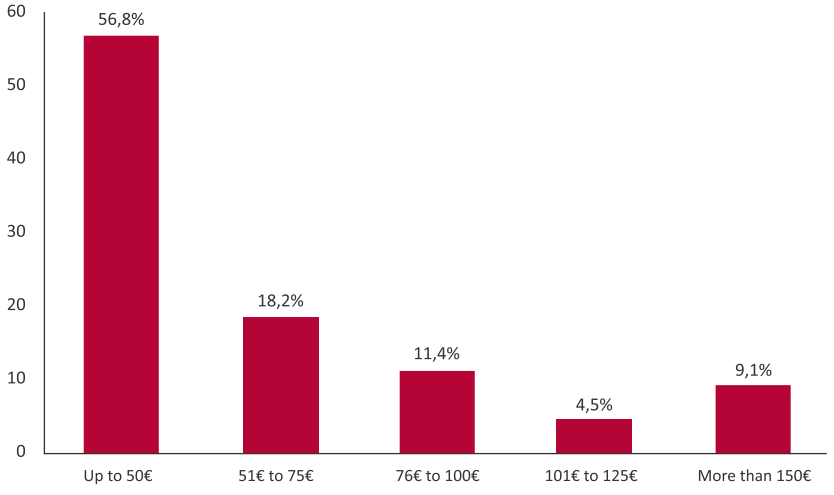


Figure 86. Expenses for displacement between the residence and the family house made by the inquired students who have no private transportation

The monthly average expenses for displacement made by the students who have no private transportation are, respectively, 31,8 Euros (from residence to school) and 55,5 Euros (from residence to family house).

Among the students who have private transportation, 62,2% use their car and the remaining students use their motorbike, moped or another vehicle. The monthly average expenses for private transportation and also for other types of transportation in the case of students who have private transportation are in Figures 87 and 88, respectively.

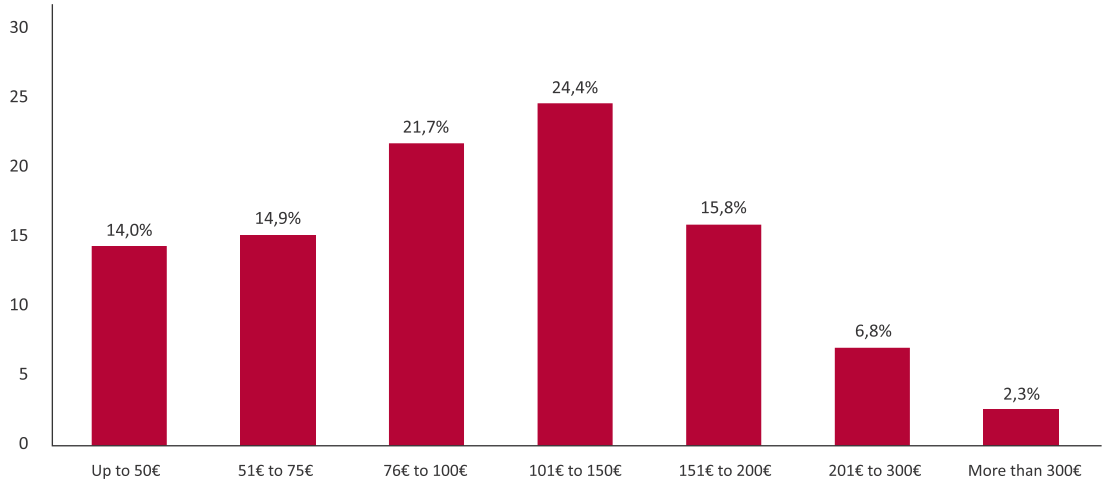


Figure 87. Expenses for transportation made by the inquired students who their own means of transport

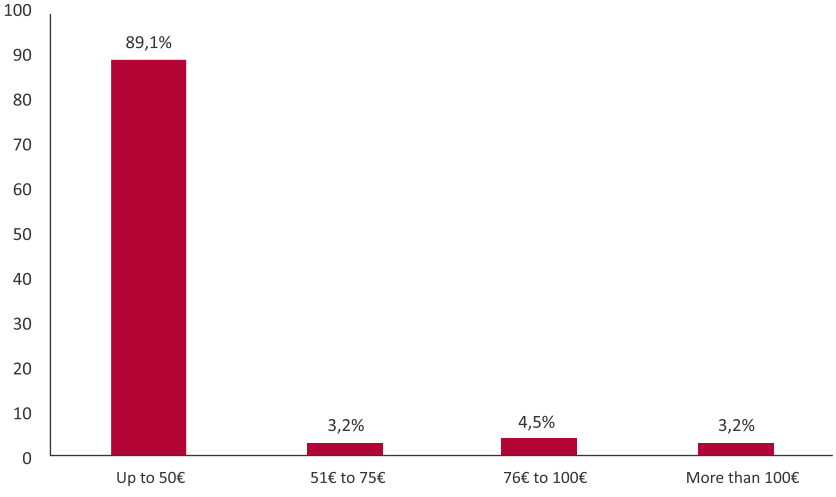


Figure 88. Expenses for the use of other means of transport made by the inquired students who have their own means of transport

The monthly average expenses made by the students who have private transportation are, respectively, 113,4 Euros (spent on private transportation) and 32,7 Euros (spent on other means of transport).

The monthly average expense for transportation is 136,1 Euros. Assuming that students only spend 50% in the area (return ticket acquired at the respective point of departure, as well as fuel), this value falls to 68,0 Euros.

Table 41 summarizes students' monthly average expenses in each of the analyzed categories.

Table 41. Summary of students' monthly average expenses per category (in Euros and in percentage)

	Accommodation	Food	Transporta tion	Other expenses	Tuition fees and taxes	Personal goods	School material	IP material	Leisure	Health
N	155	283	265	78	300	170	231	141	169	100
Mean	155,1	91,2	136,1	92,5	160,1	37,5	35,8	29,5	25,5	33,2
Median	150,0	80,0		80,0	100,0	20,0	30,0	20,0	20,0	20,0
Standard deviation	98,4	74,0		73,9	657,9	39,3	29,5	31,5	21,8	40,8
Mínimum	1,0	10,0		1,0	20,0	1,0	1,0	1,0	1,0	1,0
Maximum	863,0	700,0		350,0	1.240,0	300,0	200,0	200,0	160,0	250,0
Percentile 25	112,0	50,0		30,0	100,0	15,0	20,0	12,0	10,0	10,0
Percentile 75	160,0	100,0		105,0	110,0	50,0	50,0	30,0	30,0	50,0
% Monthly expenditure	19,5%	11,4%	17,1%	11,6%	20,1%	4,7%	4,5%	3,7%	3,2%	4,2%

In the previous table (Table 41) all the values were calculated eliminating the surveys that, in the different options, referred to zero Euros expenses, because it was considered that they altered the results.

Subsequently, the variable "total amount spent" was created and calculated through the sum of the values presented in the 10 categories already referred. Considering the total number of the inquired students, the following characterization of all the students' expenses, with and without their intangible goods, can be obtained (Table 42).

Table 42. Summary of the inquired students' monthly total average expenses (in Euros)

	Total of expenses (N=319)	Total of expenses for intangible goods (N=327)
Mean	412,5	463,7
Median	335,0	380,0
Standard deviation	679,2	680,3
Minimum	30,0	1,0
Maximum	11.565,0	11.565,0
Percentile 25	200,0	220,0
Percentile 75	475,0	565,0

In the case of students who stated that they changed residence in order to attend the current course, it appears that these students (the 143 students who presented values) spend on average 449,9 Euros (median 430,0 Euros) per month. If the intangible goods are considered, the monthly average value spent by each student rises up to 536,4 Euros (median 500,0 Euros).

In a more conservative way, the total values referred by students can be accepted without considering the expenses for intangible goods (monthly average value of 379,2 Euros). This option is supported by the fact that it isn't known whether these expenses were made in the region that is being analyzed or where their families live. Adding the values spent on transportation (68,0 Euros), a monthly average total expenditure of 447,2 Euros per student is obtained.

After analyzing the expenses, the study focused on the way students consider their current financial situation.

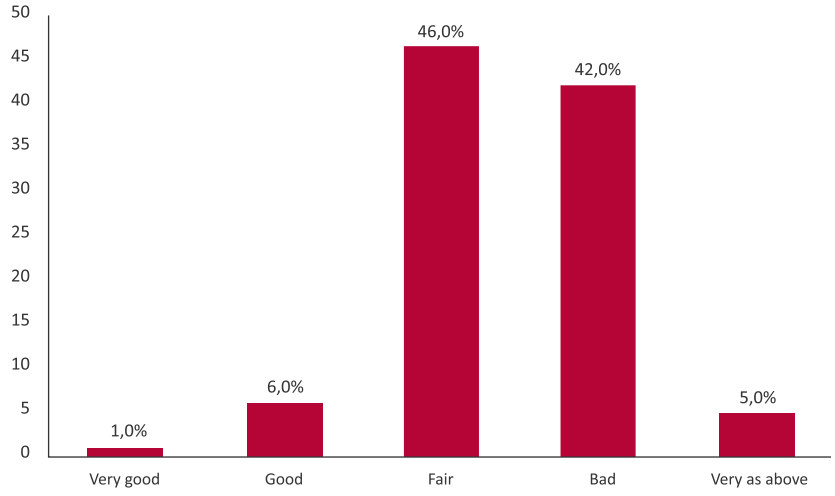


Figure 89. Evaluation of the financial situation by the inquired students

As Figure 89 shows, most students consider that their financial situation is reasonable, that is, they made financial ends meet (46% of the students). It appears that the students who consider that they have a good financial situation are fewer than those who consider that they have a bad financial situation (6,0% and 42,0%, respectively). In extreme cases, the "very bad" financial situation includes more students than the "very good" financial situation (1,0 and 5,0%, respectively).

Table 43 analyses the possible association between the financial situation and different variables.

Table 43. Association between the financial situation and the different variables considered

		Students' financial situation					
		Very good	Good	Reasonable	Bad	Very bad	Total
Sex	**Male**	2	15	87	77	12	193
	Female	3	15	84	45	7	154
							Chi-square=5,650 (p<0,05)
Did you change residence?	**Yes**	2	12	57	63	9	143
	No	3	18	114	59	10	204
							Chi-square=10,175 (p<0,05)
Type of student	**Regular**	4	16	101	73	7	201
	Student worker	1	14	69	47	12	143
							Chi-square=6,799 (p>0,05)
Age in scales	**Up to 20 years**	1	11	51	31	3	97
	21 to 22 years	1	6	43	31	3	84
	23 to 24 years	1	2	24	10	3	40
	25 to 26 years	1	1	6	12	4	24
	27 to 30 years	0	4	18	14	3	39
	More than 30 years	1	6	29	24	3	63
							Chi-square=19,894 (p>0,05)
Available income	**Up to 125 €**	1	8	33	16	3	61
	From 126 to 250 €	0	3	27	17	2	49
	From 251 to 375 €	0	1	15	20	4	40
	From 376 to 500 €	1	2	30	23	5	61
	More than 500 €	3	16	66	46	5	136
							Chi-square= 18,121 (p>0,05)

It appears that the financial situation is independent from the following variables: type of student (regular/student worker), age and available income, but it isn't independent from sex or the fact of having changed residence.

In terms of visits, the study only considered the students who stated that they have changed residence in order to attend higher education, since those who already lived in the region would receive visits in any way and this value cannot be considered as related to IPL.

The analysis of the received visits begins with the determination of the annual number of visits, as shown in Figure 90.

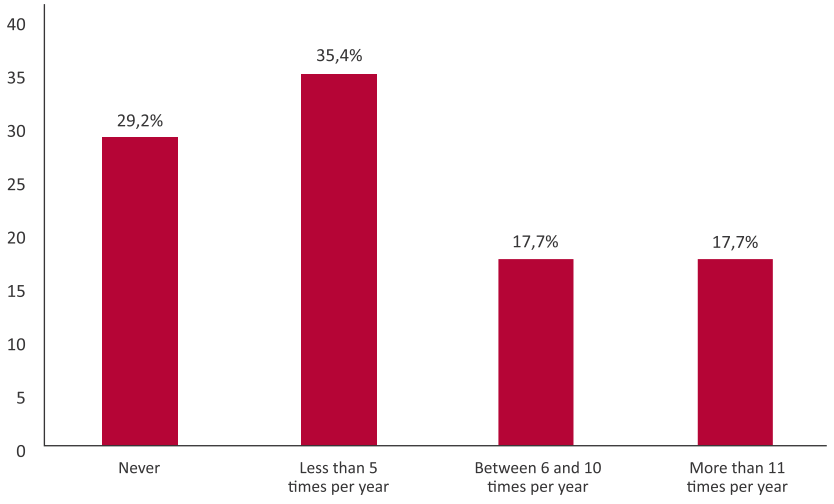


Figure 90. Frequency of the visits received by the inquired students who changed residence

Figure 90 shows that most students receive at most 5 visits per year, but there are some students who never receive visits (almost 30,0%). On average, each student receives 5,0 visits per year.

Figure 91 describes the time each visitor stays.

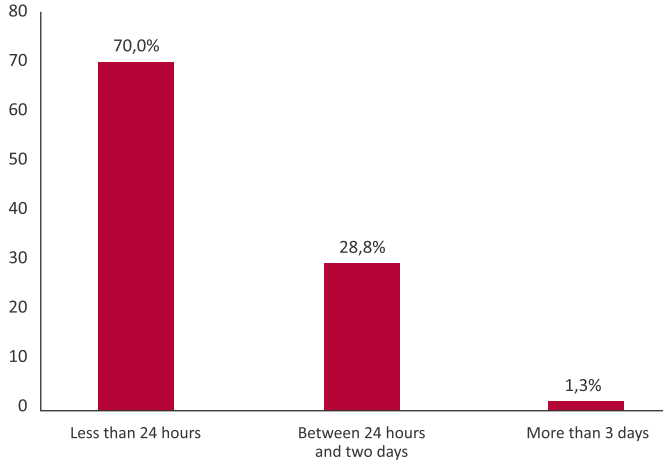


Figure 91. Duration of visits received by the inquired students who changed residence

Each visitor stays about 24 hours (on average they stay 21 hours). In fact, unlike teachers and staff members who live in the region, students moved for academic purposes. In a general way, the trend includes the fact that students visit their family and not the opposite, except for special situations such as returning from holidays, academic festivities such as Queima das Fitas, etc.

Figure 92 represents the visitors' daily expenses during their stay.

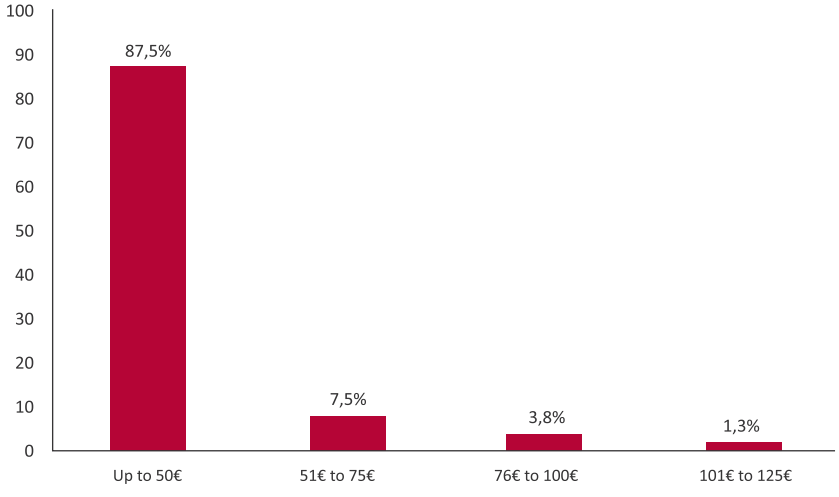


Figure 92. Daily average expenses of visits received by the inquired students who changed residence

As seen in Figure 92, 87,5% of visitors spend up to 50 Euros and on average they spend 104,9 Euros per day.

Taking into account the obtained values for the average number of annual visits, the average length of stay and daily average expenses, the annual average value used by each student to contribute for the region through the received visits is 463,9 Euros.

6.7 INTERNATIONAL MOBILITY

Concerning students' international mobility, it appears that only a very low percentage of students attended any higher education institution abroad (only 3,2% of the inquired students). Among those students, 81,8% took part in the international programme Erasmus/Tempus. The mobility destinations are, preferably, European countries; only one student chose another continent.

Finally, the study wanted to ascertain whether students were willing to stay in the region after finishing their degree. Table 45 summarizes the selected options.

Table 44. Distribution of students according to their future option of staying/ not staying in the region

	Frequency	%
Yes, if he/she finds a job	90	25,9
Yes, it is natural and he/she doesn't intend to move to another region	32	9,2
Yes, he/she has already constituted family in this region	23	6,6
Yes, he/she intends to continue training in IPL	16	4,6
No,he/she intends to return to his/her home region	30	8,6
No,he/she intends to study/work abroad	33	9,5
He/she will move to the place where he/she finds a job	70	20,2
He/she doesn't know/doesn't answer	53	15,3
Total	347	100,0

Table 44 indicates that 46,4% of the inquired students intend to stay in the region after their academic training.

6.8 SYNTHESIS OF THE STUDENTS' ANALYSIS

In short, the sample can be characterized as shown in Table 45.

Table 45. Characterization of students' sample

	Men (n=154; 44,4%)	**Women** (n=193; 55,6%)
Average age	25,7 years	24,3 years
Regular students' average age	22,2 years	21,8 years
Student workers' average age	30,2 years	28,2 years
Number of enrollment years	2,2 years	1,8 years
Services, Social and Human Sciences	23,5%	76,5%
Sciences, Engineering and Technologies	69,9%	30,1%
Health	25,0%	75,0%
Economics and Management	40,0%	60,0%
Technological Specialization Course (TSC)	23,4%	14,0%
Degree	55,2%	67,9%
Master's degree + Post-graduation/ Specialization	21,4%	18,1%

Regular students	55,9%	60,4%
Student workers	44,1%	39,6%
	100,0%	100,0%

Officially 1st year students	41,4%	44,9%
Officially 2nd year students	35,1%	33,3%
Officially 3rd year students	20,5%	21,9%
	100,0%	100,0%

	Regular student (n=201; 58,4%)	**Student worker** (n=143; 41,6%)
Male percentage	33,7%	53,0%
Average age	21,8 years	34,5 years
Number of enrollment years	2,2 years	1,8 years
Officially 1st year students	41,1%	67,8%
Officially 2nd year students	36,5%	17,8%
Officially 3rd year students	22,5%	14,4%
	100,0%	100,0%

The sample students are mostly female students (55,6%), their average age is 24,9 years old and on average they have attended IPL for 2 years.

58,4% of IPL students are regular and 41,6% are student workers and ESTM is the school which has the highest number of student workers and the highest average age.

Among the inquired students, 97,4% are Portuguese, mostly from the central region of Portugal, and only 2,6% stated a different nationality.

Almost 83% of the students are single, 11,5% married and the remaining 5,8% include all the other situations (separated, divorced, single and widowed).

The inquired students' route into higher education was, in most cases (61,1%), by general quota.

The students belong to households that have at least an employed parent, specifically, 54,8% of mothers and 56,% of fathers. However, only 36,6% of the students have employed parents. Unemployment is more significant in the mother's situation than in the father's situation (14,1% and 8,6%, respectively).

The household of 85% of the students has an average maximum gross income of 1.940 Euros per month, but about 44,7% of the inquired students belong to families that receive at most 806 Euros per month, that is, two national minimum salaries.

Most students identify family as one of the financing sources, and, among these, 70,9% have up to 350 Euros available per month. The students who benefit from a school grant, receive 100 Euros (36,5% of the cases), and 75,0% of these supported students receive up to300 Euros (but the remaining 24,2% benefit from a school grant superior to 300 Euros).

Each student who changed residence has a total average expense of 450,0 Euros per month (with 100% of transportation cost, this value rises up to 508,8 Euros). This value is distributed by accommodation, tuition fees and taxes, transportation, food, school material, personal goods, leisure activities and, in less significant way, IP material and health, in descending order of importance. If all the students are considered, this value falls to 379,2 Euros (assuming that these students spend no money on transportation; otherwise, the value would be superior).

The students who changed residence in order to attend IPL contribute with about 464 Euros per year for the region, in the form of the visits they receive. 46,4% of the inquired students were willing to stay in the region after finishing their training.

7. THE ECONOMIC IMPACT OF IPL ON THE REGION

This chapter estimates the economic impact of the Polytechnic Institute of Leiria on the region, using the simplified model developed by Fernandes (2009). It must be remembered that, as was previously stated, this study only considers the municipalities where the Institute's head offices are situated or where there are schools. In the case of IPL, these are Leiria, Caldas da Rainha and Peniche.

7.1 SIMPLIFIED MODEL

The use of this simplified model allows for a precise examination, in a more accessible and faster way than other more complex models, of the impact of IES on the region where the institutions are situated and also to standardize comparisons between institutions.

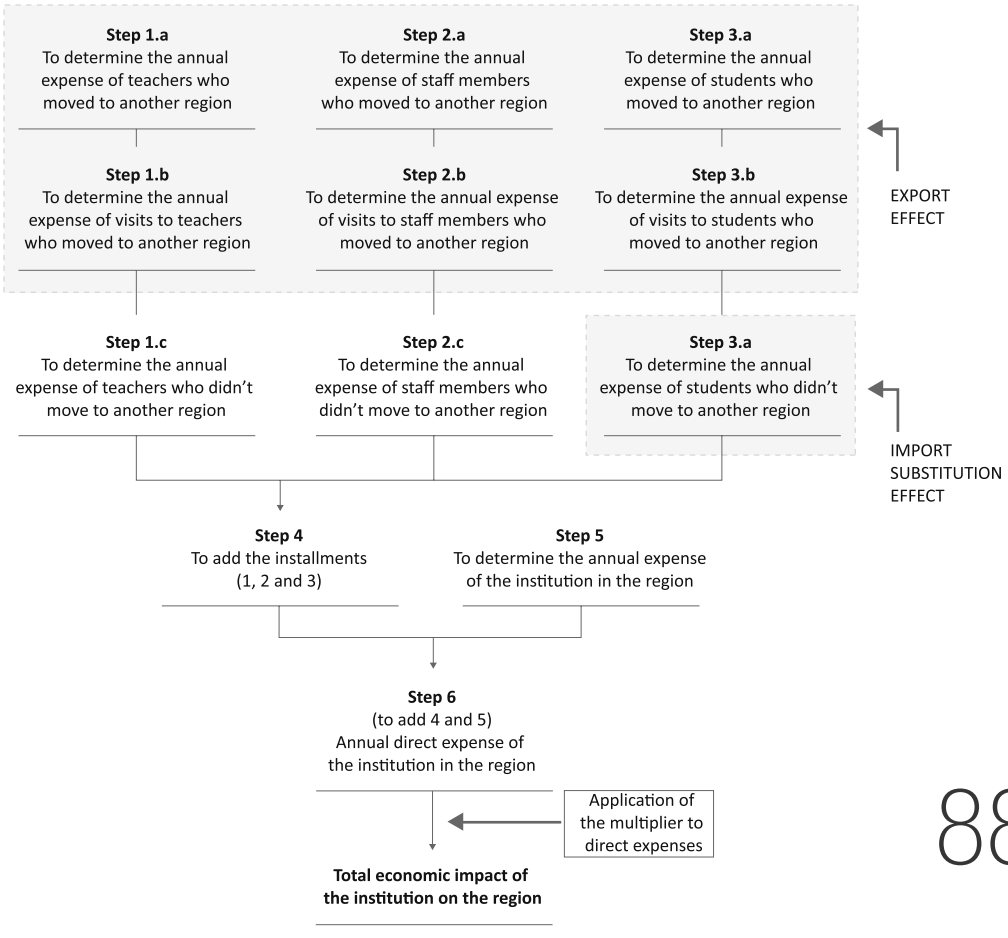
This model was based on ACE (American Council on Education Model) developed by Caffrey & Isaacs (1971). This model poses some application difficulties due to the high consumption of resources and time and, specifically, to the reality of the Portuguese context due to to the restrictions on the necessary information. Bearing this in mind, this simplified model is considered to be a valuable alternative (Fernandes, 2009).

The model estimates the impact on the region through the expenses made by each of the following four sources: teachers, staff members, students and institution. It still considers the existence of an additional expense associated to the institution, that is, the expense of the visitors associated to each of the considered sources.

One of the changes considered and introduced in this model was the fact that it was decided to account exclusively the expenses of the students who would not be in the region if they did not attend IPL. Taking this into account, the study considered the expenses of the students who moved to a new region in order to attend IPL (exportation effect) and did not consider the expenses of local students who would have moved to another region to study if IPL did not exist (importation substitution effect).

The following figure summarizes the model used.

Figure 92. Simplified model to estimate the economic impact of HEI



Source: Fernandes (2009).

Expenses made by teachers, staff members and students were calculated based on the values obtained in the surveys and described in the previous chapters.

7.2 ESTIMATING IPL IMPACT

This section describes IPL's impact on the region under study (municipalities of Leiria, Caldas da Rainha and Peniche), determined through the expenses made by each of the following four sources: teachers, staff members, students and institution. The visitors' expenses were included in the respective sources. All calculations and estimates go back to the year 2012.

All the presented average expenses were established on the basis of the completed questionnaires. However, the number of teachers, staff members and students in each of the situations implied in the model (change of residence, etc.) results from the sample extrapolation to the population, assuming, for example, that if a certain percentage of the inquired students changed residence, the same situation can be verified with equal proportion of the population.

7.2.1 TEACHERS' EXPENSES

In relation to teachers, through the analysis of the survey, it appeared that among 980 teachers 26,8% changed residence in order to work in IPL. These teachers are considered a direct impact of the existence of IPL on the region, together with their visits.

The study also considered the expenses of the teachers who did not change residence in order to work in IPL and also that do not live in the municipality where they work. In these cases the food and transportation expenses that they make during workdays result exclusively from their professional activity in IPL.

The total annual expense of teachers who work in IPL, described in Table 46, was calculated considering teachers' answers to the survey carried out in this study, from the following expression:

$$GA_{Tea\_Leiria} = G_{Tea\_changed} + GV_{Tea\_changed} + G_{Tea\_Didn't change}$$

in which:

$G_{Tea\_changed}$: Annual expense of the teachers who moved to another region;

$G_{Tea\_changed} = G_{(monthly)Tea\_changed} * N_{Tea\_changed} * 12$

$G_{(monthly)Tea\_changed}$: Monthly expense of the teachers who changed residence to Leiria, Caldas da Rainha or Peniche;

$N_{Tea\_changed}$: Number of teachers who changed residence to Leiria, Caldas da Rainha or Peniche.

$G_{VTea\_changed}$: Annual expense of visits to the teachers who changed residence;

$G_{VTea\_changed} = G_{(annual)VTea\_changed} * N_{Tea\_changed}$

$G_{(annual)VTea\_changed}$: Annual expense of visits to the teachers who changed residence to Leiria, Caldas da Rainha or Peniche;

$N_{Tea\_changed}$: Number of teachers who changed residence to Leiria, Caldas da Rainha or Peniche.

$G_{Tea\_Didn't change} = G_{(monthly\_A)Tea\_Didn't change} * T_{month\_Leiria} + G_{(monthly\_T)Tea\_Didn't change} * N_{Tea\_Didn't change} * 12$

$G_{(monthly\_A)Tea\_Didn't change}$: Monthly expense for food of the teachers who didn't change residence, but they don't live in Leiria, Caldas da Rainha or Peniche;

T_{month_Leiria}: Monthly average time in the workplace in Leiria, Caldas da Rainha or Peniche. This item was included since the teachers can work at home or participate in investigation or training projects and, in those cases, they won't make any expenses in the region of Leiria, but rather in the places where they are;

$G_{(monthly\_T)Tea\_Didn't change}$: Monthly expense for transportation of the teachers who didn't change residence and also who don't live in the region of Leiria;

$N_{Tea\_Didn't change}$: Number of teachers who didn't change residence to Leiria, Caldas da Rainha or Peniche, and also who don't live in those places.

Table 46. IPL teachers' annual direct expense in the region

Annual direct expense of IPL teachers			Obtained Value
$GA_{Tea\_Leiria} = G_{Tea\_changed} + GV_{Tea\_changed} + G_{Tea\_Didn'tchange}$			**9.106.800,00 €**
Export efect	Expenses of the teachers who moved to another region	$G_{Tea\_changed} = G_{(monthly)Tea\_changed} * N_{Tea\_changed} * 12$	7.005.215,40 €
		$G_{(monthly)Tea\_changed}$	2.219,65 €
		$N_{Tea\_changed}$	263
	Visitors' expenses	$GV_{Tea\_changed} = G_{(annual)VTea\_changed} * N_{Tea\_changed}$	68.643,00 €
		$G_{(annual)VTea\_changed}$	261,00 €
		$N_{Tea\_changed}$	263
Expenses of the teachers who didn't change region, but they don't live in Leiria, Peniche or Caldas da Rainha	$G_{Tea\_Didn'tchange} = G_{(monthly\_A)Tea\_Didn'tchange} * T_{month\_Leiria} + G_{(monthly\_T)Tea\_Didn'tchange} * N_{Tea\_Didn'tchange} * 12$		2.032.941,60 €
	$G_{(monthly\_A)Tea\_Didn'tchange}$		300,0 €
	T_{month_Leiria}		0,5
	$G_{(monthly\_T)Tea\_Didn'tchange}$		436,20 €
	$N_{Tea\_Didn'tchange}$		289

Source: Adapted from Fernandes (2009). The authors' calculation.

During the year 2012, the annual direct impact that teachers made on the municipalities of Leiria, Caldas da Rainha and Peniche is summarized in Table 60 and rises up to 9 million Euros. This total corresponds to the contribution of 7 million Euros of the teachers who changed residence, 68,6 thousand Euros of their visits and more than 2 million Euros of the teachers who do not live in Leiria, Caldas da Rainha or Peniche, but move there in order to work.

7.2.2 STAFF MEMBERS' EXPENSES

Concerning staff members, and after analysing the survey, it was observed that 23,6% of the 310 staff members changed residence in order to work in IPL. This expense is seen to be the result of IPL's location within the region. The expenses of visitors to staff members were also considered.

The expenses for food and transportation of staff members who did not change residence to work in IPL and do not live in Leiria, Caldas da Rainha or Peniche, were also considered.This is because these expenses made in the municipality where they work are exclusively due to their professional activity in IPL.

The total annual expense of staff members who work in IPL, described in Table 48, was calculated on the basis of the staff members' answers to the survey carried out in this study, through the following expression:

$$GA_{Staff\_Leiria} = G_{Staff\_changed} + G_{VStaff\_changed} + G_{Staff\_Didn'tchange}$$

in which,

$G_{Staff\_changed}$: Annual expense of the staff members who moved to another region;

$G_{Staff\_changed} = G_{(monthly)Staff\_changed} * N_{Staff\_changed} * 12$

$G_{(monthly)Staff\_changed}$: Monthly expense of staff members who changed residence to Leiria, Caldas da Rainha or Peniche;

$N_{Staff\_changed}$: Number of staff members who changed residence to Leiria, Caldas da Rainha or Peniche.

$G_{VStaff\_changed}$: Annual expense of visits to staff members who changed residence;

$G_{VStaff\_changed} = G_{(annual)VStaff\_changed} * N_{Staff\_changed}$

$G_{(annual)VStaff\_changed}$: Annual expense of visits to staff members who changed residence to Leiria, Caldas da Rainha or Peniche;

$N_{Staff\_changed}$: Number of staff members who changed residence to Leiria, Caldas da Rainha or Peniche.

$G_{Staff\_Didn't change} = G_{(monthly\_A)Staff\_Didn't change} + G_{(monthly\_T)Staff\_Didn't change)} * N_{Staff\_Didn't change} * 12$

$G_{(monthly\_A)Staff\_Didn't change}$: Monthly expense for food of staff members who didn't change residence and also who don't live in Leiria, Caldas da Rainha or Peniche;

$G_{(monthly\_T)Staff\_Didn't change}$: Monthly expense for transportation of staff members who didn't change residence and also don't live in Leiria, Caldas da Rainha or Peniche.

$N_{Staff\_Didn't change}$: Number of staff members who didn't change residence to Leiria, Caldas da Rainha or Peniche, and don't live in those municipalities.

The expenses of staff members, during 2012, are summarized in Table 47.

Table 47. IPL staff members' annual direct expense in the region

IPL staff members' annual direct expense			Obtained value
$GA_{Staff\_Leiria} = G_{Staff\_changed} + G_{VStaff\_changed} + G_{Staff\_Didn't change}$			**1.979.189,88 €**
Export effect	Expense of staff members who changed region	$G_{Staff\_changed} = G_{(monthly)Staff\_changed} * N_{Staff\_changed} * 12$	1.683.411,60 €
		$G_{(monthly)Staff\_changed}$	1.917,5 €
		$N_{Staff\_changed}$	73
	Visitors' expenses	$G_{VStaff\_changed} = G_{(annual)VStaff\_changed} * N_{Staff\_changed}$	33.054,40 €
		$G_{(annual)VStaff\_changed}$	452,80 €
		$N_{Staff\_changed}$	73
Expenses of staff members who didn't change region but don't live in Leiria, Caldas da Rainha or Peniche	$G_{Staff\_Didn't change} = G_{(monthly\_A)Staff\_Didn't change} + G_{(monthly\_T)Staff\_Didn't change)} * N_{Staff\_Didn't change} * 12$		262.723,88 €
	$G_{(monthly\_A)Staff\_Didn't change}$		220,0 €
	$G_{(monthly\_T)Staff\_Didn't change}$		336,10 €
	$N_{Staff\_Didn't change}$		39

Source: Adapted from Fernandes (2009). Authors' calculation.

Table 47 shows that, during 2012, IPL staff members channeled approximately 2 million Euros to the region. This amount is greatly due to those who changed their residence municipality in order to work in IPL.

7.2.3 STUDENTS' EXPENSES

Concerning students, the estimated value includes two types of effects: the export effect, which refers to the direct expenses of students who came from other regions in order to study in IPL and also their visitors' expenses, and the import substitution effect, which refers to the expenses of local students who would study in other regions if IPL did not exist.

According to the students' questionnaire, previously mentioned in this study, it was estimated that 5.027 students (41,2%) changed residence in order to study in one of the IPL schools and, among the students who did not change

residence, 6.354 (52,5%), would have studied in an institution in another region if they had not entered IPL.

The export effect was calculated on the grounds of the expenses of the students who moved to Leiria, Caldas da Rainha or Peniche and also their visitors' expenses.

The import substitution effect was calculated based on the expenses of the students of the region who would have moved to another region, if they hadn't entered IPL.

The total annual expense of the students who study in IPL, described in table 49, was calculated based on the students' answers to the survey carried out in this study, through the following expression:

$$GA_{Stud\_Leiria} = G_{Stud\_changed} + G_{VStud\_changed} + G_{Stud\_Didn't change}$$

in which,

$G_{Stud\_changed}$: Annual expense of the students who moved to another region;

$G_{Stud\_changed} = G_{(monthly)Stud\_changed} * N_{Stud\_changed} * 12$

$G_{(monthly)Stud\_changed}$: Monthly expense of the students who changed residence to Leiria, Caldas da Rainha or Peniche;

$N_{Stud\_changed}$: Number of students who changed residence to Leiria, Caldas da Rainha or Peniche.

$G_{GVStud\_changed}$: Annual expense of visits to the students who changed residence;

$G_{VStud\_changed} = G_{(annual)VStud\_changed} * N_{Stud\_changed}$

$G_{(annual)VStud\_changed}$: Annual expense of visits to the students who changed residence to Leiria, Caldas da Rainha or Peniche;

$N_{Stud\_changed}$: Annual expense of the students who didn't change residence, but they would have studied in another place if they hadn't entered IPL.

$G_{Stud\_Didn't change} = G_{(monthly)Stud\_Didn't change)} * N_{Stud\_Didn't change} * 12$

$G_{(monthly)Stud\_Didn't change}$: Monthly expense of the students who didn't change residence and that would have studied in another place;

$N_{Stud\_Didn't change}$: Number of students who didn't change residence and that would have studied in another place.

The impact of students on the region, during the year 2012, is summarized in table 48, exceeding 86 million Euros.

Table 48. Direct annual expense of IPL students in the region

Direct annual expense of IPL students			**Obtained value**
$GA_{Stud\_Leiria} = G_{Stud\_changed} + G_{VStud\_changed} + G_{Stud\_Didn't change}$			**86.607.131,83 €**
Export effect	Expenses of the students who changed region	$G_{Stud\_changed} = G_{(monthly)Stud\_changed} * N_{Stud\_changed} * 12$	43.438.763,89 €
		$G_{(monthly)Stud\_changed}$	508,70 €
		$N_{Stud\_changed}$	7.116
	Visitors' expenses	$G_{VStud\_changed} = G_{(annual)VStud\_changed} * N_{Stud\_changed}$	3.301.112,40 €
		$G_{(annual)VStud\_changed}$	463,90 €
		$N_{Stud\_changed}$	7.116
Import substitution effect	Expenses of the local students who would study in another region	$G_{Stud\_Didn't change} = G_{(monthly)Stud\_Didn't change)} * N_{Stud\_Didn't change} * 12$	39.867.255,54 €
		$G_{(monthly)Stud\_Didn't change}$	522,90 €
		$N_{Stud\_Didn't change}$	6.354

Source: Adapted from (2009). Authors' calculation.

As seen in Table 48, the students who did not change region and who would move to another region to study, have higher monthly expenses than the students who changed region; this is due to the fact that a significant number of those students who did not change region are student-workers; these have average monthly expenses of 659,6€, while the regular students present 460,6€ of monthly expenses.

The data suggest that students' impact is higher than that of teachers and staff members for, in spite of spending a lower average value per month, students are about ten times more than the number of teachers and staff members.

7.2.4 INSTITUTION EXPENSES[29]

Institution expenses are regarded as the total amount of money spent on goods and services in the municipalities where IPL is inserted. Taking this into account, from the total expenses of the institution, that in 2012 rose up to 6.815.930,62 Euros, about 48,64% were made in the municipalities under study, which corresponds to 3.315.361,97 Euros

7.2.5 VALUES SUMMARY

IPL's direct impact on the region of Leiria, Caldas da Rainha and Peniche, in the form of direct expenses, corresponds, in 2012, to 101.008.483,69 Euros (Table 49).

Table 49. IPL direct impact on the region in 2012

	Obtained value
IPL total direct impact on the region (1+2+3+4)	**101.008.483,69 €**
(1) Teachers' annual expense	9.106.800,0 €
(2) Staff members' annual expense	1.979.189,88 €
(3) Students' annual expense	86.607.131,83 €
(4) Institution annual expense	3.315.361,97 €

Source: Own elaboration.

A multiplier of 1,7 was applied to the values described in Table 49, according to the model described in Figure 93. This value was determined on the basis of the median of the different multipliers used in the literature supporting this study (Fernandes, 2009).

When the multiplier of 1,7 is applied to annual expenses, it is possible to obtain IPL's total direct and indirect annual impact on the region, , which totals 171.714.422,27 Euros, corresponding, in 2012, to 5,98% of the PIB of the municipalities under study[30].

In addition, the study intended to determine the return of the investment made by the State in IPL. For this purpose, the study considered the direct and indirect impact generated by the Polytechnic Institute, in relation to the state budget actually received by IPL in 2012 (21.269.636,00 €[31]). The study

[29] Data provided by IPL Financial Services Direction.
[30] Considering a IPB of 2.872.815.943,90 € for the municipalities of Leiria, Caldas da Rainha and Peniche, estimated on the basis of the information given by INE for the NTUS III referring to 2011 and Ramos (1998).
[31] SI net income attributed to IPL in 2012. Source: IPL Financial Services Direction

concluded that for each Euro invested by the state in financing IPL , an economic activity level of 8,07 Euros is generated in the region.

Through the concept of apparent labour productivity it is possible to convert the economic impact into the number of jobs created due to the existence of IPL schools in these municipalities.

Taking an optimistic view, one can conclude that 6.321 jobs result from the fact that IPL is situated in Leiria, Caldas da Rainha and Peniche, corresponding to 6,27% of the working population of these municipalities, if a job multiplier of 4,9 is applied.

7.3 SYNTHESIS OF THE OBTAINED RESULTS

Based on the previous calculations, the study obtained the following results related to IPL's direct impact in 2012:
1. Teachers: Considering 980 teachers, the direct annual expense estimated for 2012 rose up to 9,1 million Euros broken down by 7,0 million Euros of expenses made by teachers who changed region; 68 thousand Euros made by the visits those teachers received; and about 2 million Euros of expenses made by the teachers who did not change region but do not live in the municipality where they work;
2. Staff members: The direct annual expense estimated for 2012 is almost 2 million Euros, broken down by 1,6 million Euros of expenses made by the staff members who changed region, 33 thousand Euros made by the visits those staff members received and 260 thousand Euros of expenses made by the staff members who did not change region but do not live in the municipality where they work;
3. Students: The expense in the region exceeded 86 million Euros, broken down by 43,4 million Euros of expenses made by the students who changed region, 3,3 million Euros made by the visits they received and the total import substitution effect; the expenses of local students, who would study in another region, rose up to almost 40 million Euros;
4. The last value taken into account corresponds to the institutional expenses for the purchase of goods and services in the region, which, In 2012, were approximately 3,3 million Euros.

Based on these values, it was possible to estimate **IPL's total impact on the region where it is located**. In 2012, the total impact, including direct, indirect and induced impact, considering a multiplier of 1,7, **was of 171,7 million Euros** . The application of this multiplier is one of the sensitive aspects of the model, since these values do not exist at a regional level. It allows, however, the assessment of the impact according to an optimistic perspective; from a pessimistic perspective (direct impact) one can consider the multiplier 1,0, which would imply a total economic impact of 101.008.483,69 Euros.

Considering that the income transferred by the state to IPL, referring to 2012, was 21,3 million Euros, it can be stated that **for every Euro spent by the state financing IPL, a level of economic activity - in the municipalities of Leiria, Caldas da Rainha and Peniche - between 4,75 Euros** (in a pessimistic perspective, that is, the direct impact) and **8,07 Euros** (in an optimistic perspective, accounting for both direct and indirect impact) is generated.

[32] Calculated by dividing the value of total institute impact and SI value transferred to IPL, in 2012: 21,3 million Euros.
[33] It was considered the working population of 2011, according to Population and Housing Censuses of NIS, because of a lack of available data for 2012.
[34] The exact value obtained was 171.714.422,27 Euros

8. FINAL CONSIDERATIONS

The completion of this study made it possible to reach some relevant conclusions concerning the different groups involved in the sample.

Concerning teachers, it is observed that they are mostly males, their average age is about 45,1 years old and their average length of service in IPL is 15,2 years. In the case of staff members, most of them are females, their average age is 40,9 years old and their average length of service in the institution is 12,1 years.

As for academic qualifications, most teachers have a Ph.D. (50,7%) and 38% have at least a Master's degree, while non-teaching staff members are mostly distributed in a higher academic training.

In the case of teachers, the composition of their household varies generically between 1 and 4 persons, with 1 or 2 children; the average gross income of these households is 3.668,7 Euros per month and their total average expense is 2.154,9 Euros per month.

In the case of staff members, the household presents the same composition and the number of children varies between 1 and 2. Their average gross income is 2.268,9 Euros per month, with average expenses of 1.596,2 Euros per month. In terms of banking operations, it was observed that both teachers and staff members contracted bank loans in the agencies in the municipalities where they work, and each respondent saved on average 348 and 128,8 Euros per month, respectively. In both cases, the main aim of bank loans is the purchase of private house/apartment, followed by buying a car.

Comparing teachers to staff members, there is a difference between the gross incomes of the householdsThese are higher in the case of teachers, which means they have higher financial availability, whether for monthly expenses or for savings.

In relation to the inquired students, most of them are females (55,6%), their average age is 24,9 years old and they have attended IPL for 2 years. There is a high percentage of student workers (41,6%)and almost every student is of Portuguese nationality and from the central region of Portugal. About 83% of the inquired students are single, having entered higher education mostly by general quota (61,1%).

In the students' households, at least one parent has got a job, and only 36,6% of the students have employed parents. The household of 85% of the students has a maximum average gross income of 1.940 Euros per month and thefamily is the main financing source of students' school activity.

The average monthly expense of each student who changed residence, in order to study in IPL, is 508,8 Euros, distributed mostly by tuition fees and taxes, transportation, accommodation and food.

When students were asked about their intentions of staying in the region after finishing a degree, about 46,4% announced their intention to stay.

Finally, the study examined the economic impact generated by the location of IPL in the municipalities of Leiria, Caldas da Rainha and Peniche, with a direct and indirect impact superior to 171,7 million Euros, which corresponds to a return of 8,07 Euros for each Euro invested by the State in financing IPL and to a weight of 5,98% in the PIB of those municipalities. This economic impact is linked to the creation of 6.321 jobs, which represent 6,27% of the working population in the municipalities where IPL is situated.

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ATTACHMENT

ATTACHMENT I
TEACHERS' QUESTIONNAIRE

This survey is part of an investigation project that aims at determining the economic impact of the Polytechnic Institute of Leiria on the development of the region, which requires a socioeconomic and professional characterization of teachers.

In this context, we ask for your contribution filling out the following questionnaire. The collected data are **absolutely confidential** and will be treated having as single goal the study mentioned above.

There are 42 questions in this questionnaire.

1. PROFESSIONAL CHARACTERIZATION

1 What is your professional category? *

- ☐ Main Coordinating Teacher
- ☐ Coordinating Teacher
- ☐ Adjunct Teacher
- ☐ Guest Coordinating Teacher or equivalent
- ☐ Guest Adjunct Teacher or equivalent
- ☐ Guest assistant or equivalent
- ☐ Monitor
- ☐ Other. Which?

2 Specify your labour contract *

- ☐ Fixed-term
- ☐ Indefinite duration

3 Place where you work *

- ☐ ESAD
- ☐ ESECS
- ☐ ESS
- ☐ ESTG
- ☐ ESTM
- ☐ FOR.CET
- ☐ Other. Which?

4 How long have you worked in the Polytechnic Institute? *

_____ years

5 On average, how many days per week are you in the Polytechnic Institute? *

- ☐ 1 day
- ☐ 2 days
- ☐ 3 days
- ☐ 4 days
- ☐ 5 days

6 How do you evaluate the facilities of the Polytechnic Institute where you work? *

- ☐ Very satisfactory
- ☐ Satisfactory
- ☐ Acceptable
- ☐ Bad
- ☐ Very bad

2. FAMILY AND PERSONAL CHARACTERIZATION

7 Sex *

- ☐ Female
- ☐ Male

8 Age *

____ years

9 Marital Status *

- ☐ Single
- ☐ Married
- ☐ Separated
- ☐ Divorced
- ☐ Unmarried partnership
- ☐ Widow/widower

10 Academic qualification *

- ☐ Bachelor
- ☐ Degree
- ☐ Master's degree
- ☐ Doctoral degree
- ☐ Other. Which?

11 What was your residence municipality before being a teacher in the Polytechnic Institute of Leiria? *

_____

12 What is your current residence municipality *

_____

13 Did you change your residence municipality in order to work in the Polytechnic Institute? *

- ☐ Yes
- ☐ No

14 Do you live with the other members of your household? *

- ☐ Yes
- ☐ No

15 How many persons constitute your household? *

_____persons

16 Do you have children? *

☐ Yes

☐ No

17 How many children do you have? * (Only answer those who have children)

_____

18 How old is your youngest child? * (Only answer those who have children)

_____ years

19 Refer the number of children and their corresponding school cycle: *
(Only answer those who have children)

	Public Education	Private Education
Nursery school		
1st cycle of basic education		
2nd cycle of basic education		
3rd cycle of basic education		
Secondary school		
Higher education		
Other/Not applicable		

20 Which is the other school cycle your children attend? Why is it "not applicable"? *

_____

3. LIVING CONDITIONS

21 Which is your type of accommodation during the school semester? *

☐ Rented room

☐ Parents' or relatives' house

☐ Private house/apartment

☐ Rented house/apartment

☐ Other. Which?

22 What is the monthly gross average income of your household? *

☐ Up to 970€

☐ Between 971€ and 1 940€

☐ Between 1 941€ and 2 910€

☐ Between 2 911€ and 3 880€

☐ Between 3 881€ and 4 850€

☐ Between 4 851€ and 5 820€

☐ Between 5 821€ and 6 790€

☐ More than 6791€

23 What are your household monthly average expenses for: *

	Euros
Accommodation (e.g. rent or loan instalment)	
Children's education	
Food	
Books and other school material	
Health expenses	
Leisure activities (e.g. cinema, shows, etc.)	
Personal goods (e.g. clothes, hygiene articles, detergents, etc.)	
IT material and Internet	
Current expenses (e.g. electricity, gas, water, cable TV, etc.)	
Other expenses (excluding transportation)	

24 Specify the other monthly expenses you have in your household. *
(Only answer those who selected the option "other expenses" in the question above)

_____

25 Where do you regularly have your meals? *

	At home (or bring meals from home)	At the school canteen	At the school bar	At commercial establishments
Breakfast				
Lunch				
Dinner				

26 Do you have your own means of transport? *

☐ Yes
☐ No

27 Refer your monthly average travel expenses (e.g. bus ticket, taxi, ride sharing, air ticket, etc.). *
(Only answer those who do not have their own means of transport)

☐ Up to 50€
☐ Between 51€ and 75€
☐ Between 76€ and 100€
☐ Between 101€ and 125€
☐ Between 126€ and 150€
☐ More than 150€

28 How many means of transport are there in your household? Which? *
(Only answer those who have their own means of transport)

Car	
Motorcycle (less than 50 c.c.)	
Moped (more than 50 c.c.)	
Other	

29 Which is the <u>other</u> means of transport that your household has? *

_____

30 What are the monthly average expenses for the use of your means of transport (e.g. fuel, maintenance, repair services, insurance, tolls, etc.)? *
(Only answer those who have their own means of transport)

- ☐ None
- ☐ Up to 50€
- ☐ Between 51€ and 75€
- ☐ Between 76€ and 100€
- ☐ Between 101€ and 125€
- ☐ Between 126€ and 150€
- ☐ Between 151€ and 200€
- ☐ Between 201€ and 300€
- ☐ Between 301€ and 500€
- ☐ More than 500€

31 What are the monthly average travel expenses in other means of transport (e.g. bus ticket, taxi, ride sharing, air ticket, etc.) * (Only answer those who do not have their own means of transport)

- ☐ None
- ☐ Up to 50€
- ☐ Between 51€ and 75€
- ☐ Between 76€ and 100€
- ☐ Between 101€ and 125€
- ☐ Between 126€ and 150€
- ☐ More than 150€

32 How often do you usually receive visits from your relatives/friends *
(Only answer those who changed their residence municipality in order to work in the Polytechnic Institute)

- ☐ Never
- ☐ Less than 5 times per year
- ☐ Between 6 to 10 times per year
- ☐ More than 10 times per year

33 How long, on average, do your visits stay? * (Only answer those who changed their residence municipality in order to work in the Polytechnic Institute)

- ☐ Less than 24 hours
- ☐ Between 24 hours and two days
- ☐ Three or more days

34 On average, how much do your visits spend per day? * (Only answer those who changed their residence municipality in order to work in the Polytechnic Institute))

- ☐ Up to 50€
- ☐ Between 51€ and 75€
- ☐ Between 76€ and 100€
- ☐ Between 101€ and 125€
- ☐ Between 126€ and 150€
- ☐ Between 151€ and 175€
- ☐ More than 175€

35 Is your salary deposited in a bank agency of the municipality where you work? *

☐ Yes

☐ No

36 Are your savings deposited in a bank agency of the municipality where you work? *

☐ Yes

☐ No

37 On average, how much does your household save per month? *

☐ Up to 50€

☐ Between 51€ and 100€

☐ Between 101€ and 250€

☐ Between 251€ and 500€

☐ Between 501€ and 750€

☐ Between 751€ and 1000€

☐ More than 1000€

38 Do you have any loan in a bank agency of the municipality where you work? *

☐ Yes

☐ No

39 Refer the initial amount of the loan: * (Only answer those who have a loan in a bank agency of the municipality where they work)

☐ Up to 10 000€

☐ Between 10 001€ and 25 000€

☐ Between 25 001€ and 50 000€

☐ Between 50 001€ and 75 000€

☐ Between 75 001€ and 100 000€

☐ More than 100 000€

40 Did you make any investment or acquisition in the municipality where you work? (private house, house for renting, car, enterprise, etc.)? *

☐ Yes

☐ No

41 What is the total value of that/those investment(s) or acquisition in the municipality where you work? * (Only answer those who made an investment or acquisition in the municipality where they work)

	Euros
Private house	
House for renting	
Car	
Enterprise	
Other	

42 Which other investment or acquisition did you make in the municipality where you work? *

_____

Thank you very much for your collaboration!

ATTACHMENT II
STAFF MEMBERS' QUESTIONNAIRE

This survey is part of an investigation project that aims at determining the economic impact of the Polytechnic Institute of Leiria on the development of the region, which requires a socioeconomic and professional characterization of non-teaching staff members of the Institute.

In this context, we ask for your contribution filling out the following questionnaire. The collected data are **absolutely confidential** and will be treated having as single goal the study mentioned above.

There are 40 questions in this questionnaire.

1. PROFESSIONAL CHARACTERIZATION

1 What is your professional category? *

- ☐ Chief Executive
- ☐ Senior Technician
- ☐ Technical Assistant (technical coordinator or technical assistant)
- ☐ Operations Assistant (general operations manager, operations manager or operations assistant)
- ☐ Computer Specialist
- ☐ Computer Technician
- ☐ Other. Which?

2 Place where you work: *

- ☐ Central Services
- ☐ Social Services
- ☐ ESAD - Campus 3
- ☐ ESECS - Campus 1
- ☐ ESSLei - Campus 2
- ☐ ESTG - Campus 2
- ☐ ESTM - Campus 4
- ☐ Campus 5
- ☐ Other. Other?

3 How long have you worked in the Polytechnic Institute? *

_____ years

4 How do you evaluate the facilities of the Polytechnic Institute where you work? *

- ☐ Very satisfactory
- ☐ Satisfactory
- ☐ Acceptable
- ☐ Bad
- ☐ Very bad

2. FAMILY AND PERSONAL CHARACTERIZATION

5 Sex *

☐ Female

☐ Male

6 Age *

_____ years

7 Marital Status *

☐ Single

☐ Married

☐ Divorced

☐ Unmarried partnership

☐ Widow/widower

8 Academic qualification *

☐ Basic Education

☐ Incomplete Secondary education

☐ Complete Secondary Education

☐ Bachelor

☐ Degree

☐ Post-graduation

☐ Master's Degree

☐ Doctoral Degree

9 What was your residence municipality before being a staff member in the Polytechnic Institute of Leiria? *

_____

10 What is your current residence municipality? *

_____

11 Did you change your residence municipality in order to work in the Polytechnic Institute? *

☐ Yes

☐ No

12 Do you live with the other members of your household? *

☐ Yes

☐ No

13 How many persons constitute your household? *

_____ persons

14 Do you have children? *

☐ Yes

☐ No

15 How many children do you have? * (Only answer those who have children)

_____

16 How old is your youngest child? * (Only answer those who have children)

_____ years

17 Refer the number of children and their corresponding school cycle: *
(Only answer those who have children)

	Public Education	Private Education
Nursery school		
1st cycle of basic education		
2nd cycle of basic education		
3rd cycle of basic education		
Secondary school		
Higher education		
Other/Not applicable		

18 Which is the other school cycle your children attend? Why is it "not applicable"? *

_____

3. LIVING CONDITIONS

19 What is your type of accommodation during the working week in the Institute? *

- ☐ Rented room
- ☐ Parents'/relatives' house
- ☐ Private house/ apartment
- ☐ Rented house/apartment
- ☐ Other. Which?

20 What is the monthly gross average income of your household? *

- ☐ Up to 485€
- ☐ Between 486 and 970€
- ☐ Between 971€ and 1 940€
- ☐ Between 1 941€ and 2 910€
- ☐ Between 2 911€ and 3 880€
- ☐ Between 3 881€ and 4 850€
- ☐ Between 4 851€ and 5 820€
- ☐ Between 5 821 and 6 970€
- ☐ More than 6 791€

21 What are your household monthly average expenses for: *

	Euros
Accommodation (e.g. rent or loan instalment)	
Children's education	
Food	
Books and other school material	
Health expenses	
Leisure activities (e.g. cinema, shows, etc.)	
Personal goods (e.g. clothes, hygiene articles, detergents, etc.)	
IT material and Internet	
Current expenses (e.g. electricity, gas, water, cable TV, etc.)	
Other expenses (excluding transportation)	

22 Specify the other monthly expenses you have in your household. *
(Only answer those who selected the option "other expenses" in the question above)

_____

23 Where do you regularly have your meals? *

	At home (or bring meals from home)	At the school canteen	At the school bar	At commercial establishments
Breakfast				
Lunch				
Dinner				

24 Do you have your own means of transport? *

☐ Yes
☐ No

25 Refer your monthly average travel expenses (e.g. bus ticket, taxi, ride sharing, air ticket, etc.). *
(Only answer those who do not have their own means of transport)

☐ Up to 50€
☐ Between 51€ and 75€
☐ Between 76€ and 100€
☐ Between 101€ and 125€
☐ Between 126€ and 150€
☐ More than 150€
☐ None

26 How many means of transport are there in your household? Which? *
((Only answer those who have their own means of transport)

Car	
Motorcycle (less than 50 c.c.)	
Moped (more than 50 c.c.)	
Other	

27 Which is the <u>other</u> means of transport that your household has? *

_____

28 What are the monthly average expenses for the use of your means of transport (e.g. fuel, maintenance, repair services, insurance, tolls, etc.)? *
(Only answer those who have their own means of transport)

- ☐ None
- ☐ Up to 50€
- ☐ Between 51€ and 75€
- ☐ Between 76€ and 100€
- ☐ Between 101€ and 150€
- ☐ Between 151€ and 200€
- ☐ Between 201€ and 300€
- ☐ Between 301€ and 500€
- ☐ More than 500€

29 What are the monthly average travel expenses in <u>other</u> means of transport (e.g. bus ticket, ride sharing, air ticket, etc.) *
(Only answer those who do not have their own means of transport)

- ☐ None
- ☐ Up to 50€
- ☐ Between 51€ and 75€
- ☐ Between 76€ and 100€
- ☐ Between 101€ and 125€
- ☐ Between 126€ and 150€
- ☐ More than 150€

30 How often do you usually receive visits from your relatives/friends? *
(Only answer those who changed their residence municipality in order to work in the Polytechnic Institute)

- ☐ Never
- ☐ Less than 5 times per year
- ☐ Between 6 to 10 times per year
- ☐ More than 10 times per year

31 How long, on average, do your visits stay? * (Only answer those who changed their residence municipality in order to work in the Polytechnic Institute)

- ☐ Less than 24 hours
- ☐ Between 24 hours and two days
- ☐ Three or more days

32 On average, how much do your visits spend per day? * (Only answer those who changed their residence municipality in order to work in the Polytechnic Institute)

- ☐ Up to 50€
- ☐ Between 51€ and 75€
- ☐ Between 76€ and 100€
- ☐ Between 101€ and 125€
- ☐ Between 126€ and 150€
- ☐ Between 151€ and 175€
- ☐ More than 175€

33 Is your salary deposited in a bank agency of the municipality where you work? *

☐ Yes

☐ No

34 Are your savings deposited in a bank agency of the municipality where you work? *

☐ Yes

☐ No

35 On average, how much does your household save per month? *

☐ Up to 50€

☐ Between 51€ and 100€

☐ Between 101€ and 200€

☐ Between 201€ and 300€

☐ Between 301€ and 400€

☐ Between 401€ and 500€

☐ More than 500€

36 Do you have any loan in a bank agency of the municipality where you work? *

☐ Yes

☐ No

37 Refer the initial amount of the loan: * (Only answer those who have a loan in a bank agency of the municipality where they work)

☐ Up to 10 000€

☐ Between 10 001€ and 25 000€

☐ Between 25 001€ and 50 000€

☐ Between 50 001€ and 75 000€

☐ Between 75 001€ and 100 000€

☐ More than 100 000€

38 Did you make any investment or acquisition in the municipality where you work? (private house, house for renting, car, enterprise, etc.)? *

☐ Yes

☐ No

39 What is the total value of that/those investment(s) or acquisition in the municipality where you work? * (Only answer those who made an investment or acquisition in the municipality where they work)

	Euros
Private house	
House for renting	
Car	
Enterprise	
Other	

40 Which other investment or acquisition did you make in the municipality where you work? *

_____

Thank you very much for your collaboration!

ATTACHMENT III
STUDENTS' QUESTIONNAIRE

This survey is part of an investigation project that aims at determining the economic impact of the Polytechnic Institute of Leiria on the development of the region, which requires a socioeconomic characterization of students.

In this context, we ask for your contribution filling out the following questionnaire. The collected data are **absolutely confidential** and will be treated having as single goal the study mentioned above.

There are 55 questions in this questionnaire.

PERSONAL CHARACTERIZATION

1 Sex *

☐ Female
☐ Male

2 Age *

_____ years

3 Nationality *

☐ Portuguese
☐ Other. Which?

4 Marital status *

☐ Single
☐ Married
☐ Separated
☐ Divorced
☐ Unmarried partnership
☐ Widow/widower

5 Do you have any children? *

☐ Yes
☐ No

6 How many children do you have? * (Only answer those who have children)

_____

7 How old is your youngest child? * (Only answer those who have children)

_____ years

8 What was your residence municipality before entering the Polytechnic Institute of Leiria? *

_____

9 What is your household residence municipality? *

_____

10 Did you change your residence municipality in order to attend your current course? *

☐ Yes

☐ No

11 What was the main reason to live in this region? *

☐ I am from this region

☐ To attend a higher education establishment

☐ Professional reasons

☐ Other. Which?

SCHOOLING PATH

12 Course: *

_____

13 Enrollment year *

☐ 1st year

☐ 2nd year

☐ 3rd year

☐ 4th year

14 1st enrollment year *

_____

15 Student: *

☐ Regular

☐ Student worker (with status)

☐ Student worker (without status)

☐ Attending isolated Course Units (CU)

16 School you are attending: *

☐ ESAD

☐ ESECS

☐ ESS

☐ ESTG

☐ ESTM

17 Is the course you are enrolled in your 1st option? *

☐ Yes

☐ No

18 What was your type of access to Higher Education? *

☐ General quota

☐ CET

☐ Over 23 years

☐ Other. Which?

19 Would you have studied in another Higher Education Institution if you hadn't entered this Polytechnic Institute? *

- ☐ Yes
- ☐ No

20 Why? *

(Only answer those who would not have studied in another higher education institution)

- ☐ Because the course I wanted to attend only existed in this institution
- ☐ Because I could not travel long distances to study, due to economic difficulties
- ☐ Because I could not travel long distances to study, due to professional reasons
- ☐ Other. Which?

21 Did you have any professional experience before accessing Higher Education? *

- ☐ Yes
- ☐ No

CURRENT SCHOOL SITUATION

22 How many weekly hours do you spend attending classes? *

- ☐ Up to or 5 hours
- ☐ From 6 to 10 hours
- ☐ From 11 to 15 hours
- ☐ From 16 to 20 hours
- ☐ From 21 to 25 hours
- ☐ From 26 to 30 hours
- ☐ More than 30 hours

23 How many weekly hours do you spend studying, individually or in group, outside the classroom? *

- ☐ Up to or 5 hours
- ☐ From 6 to 10 hours
- ☐ From 11 to 15 hours
- ☐ From 16 to 20 hours
- ☐ From 21 to 25 hours
- ☐ More than 25 hours

24 What is your current professional situation? *

(Only answer those who are student workers)

- ☐ Entrepreneur (with employees)
- ☐ Independent or entrepreneur (without employees)
- ☐ Employed worker
- ☐ Unpaid family job (working in a family-run business, without any salary)
- ☐ Other. Which? _____

25 How many hours do you work per week? *
(Only answer those who are student workers)

☐ Less than 5 hours
☐ From 6 to 10 hours
☐ From 11 to 15 hours
☐ From 16 to 35 hours
☐ More than 35 hours

26 What is the relationship between your professional activity and your study area? * (Only answer those who are student workers)

☐ Completely related
☐ Quite related
☐ Not very related
☐ Not related at all

LIVING CONDITIONS

27 What is your type of accommodation during the school semester? *

☐ Individual rented room
☐ Shared rented room
☐ Student residence
☐ Parents' or relatives' house
☐ Private house/apartment
☐ Rented house/apartment
☐ Other. Which?

28 How do you evaluate your accommodation conditions? *

☐ Very satisfactory
☐ Satisfactory
☐ Acceptable
☐ Bad
☐ Very bad

29 Refer the origin of the monthly average income/budget you can get: *

	Euros
Family or partner	
State financial support in the form of a subsidy (non-repayable)	
State financial support in the form of a loan (repayable)	
State financial support in the form of a school grant (non-repayable)	
Financial support from non-state entities	
Income earned through work	
Other sources.	

30 Specify what the other sources of income *

_____

31 If you bring consumable goods from home, such as food, bus tickets bought by relatives, etc., quantify their monthly value: *

_____ Euros

32 Specify your monthly average expenses in the place where you study: *

	Euros
Accomodation	
Food	
Books and other school material	
Health expenses	
Leisure activities (e.g. cinema, bars, discos, going out at night)	
Personal goods (e.g. clothes, hygiene articles, detergents, etc.)	
IT equipment and Internet	
Tuition fees, enrollment rates, exam fees, etc. (consider the annual value and divide it by 10)	
Other expenses.	

33 Specify the other expenses you have in the place where you study. *

_____

34 How do you evaluate your financial situation? *

- ☐ Very good (that is, you managed to save money)
- ☐ Good (that is, you did not have any problem)
- ☐ Reasonable (that is, you made financial ends meet)
- ☐ Bad (that is, you had to cut many expenses)
- ☐ Very bad (that is, you had to contract loans/use savings)

35 Where do you regularly have your meals? *

	At home (or bring meals from home)	At the school canteen	At the school bar	At commercial establishments
Breakfast				
Lunch				
Dinner				

36 How far is your current residence from your education establishment? *

- ☐ <2km
- ☐ >=2 - <5km
- ☐ >=5 - <20km
- ☐ More than 20km

37 Which is the means of transport used to travel from you current residence to your education establishment? *

- ☐ On foot
- ☐ Public transport
- ☐ Private transport
- ☐ Other. Which?

38 Refer your monthly average expenses during school time (e.g. bus ticket, taxi, ride sharing, etc.) for travelling between your residence and: *

(Only answer those who use public transports to travel from their residence to the education establishment)

	< 50€	50€ to 75€	76€ to 100€	101€ to 125€	126€ to 150€	> 150€
Education establishment						
Relatives' house						

39 Which means of transport do you have? *

(Only answer those who travel from their residence to the education establishment using private transport)

- ☐ Car
- ☐ Motorcycle (<50 c.c.)
- ☐ Moped (>50 c.c.)
- ☐ Other. Which?

40 What are the monthly average expenses for the use of transportation (e.g. fuel, maintenance, repair services, insurance, tolls, etc.)?

(Only answer those who travel from their residence to the education establishment using private transport)

- ☐ Up to 50€
- ☐ Between 51€ and 75€
- ☐ Between 76€ and 100€
- ☐ Between 101€ and 150€
- ☐ Between 151€ and 200€
- ☐ Between 201€ and 300€
- ☐ More than 300€

41 What are the monthly average expenses for travelling in other means of transport (e.g. bus ticket, taxi, ride-sharing, air ticket, etc.)?

(only answer those who don't use any private transport travelling from their current residence and the education establishment)

- ☐ Up to 50€
- ☐ Between 51€ and 75€
- ☐ Between 76€ and 100€
- ☐ Between 101€ and 125€
- ☐ Between 126€ and 150€
- ☐ More than 150€

42 How often do you usually receive visits from your relatives/friends? *

(Only answer those who changed their residence municipality in order to attend their current course)

- ☐ Never
- ☐ Less than 5 times per year
- ☐ Between 6 to 10 times per year
- ☐ More than 11 times per year

43 How long, on average, do your visits stay? *

(Only answer those who changed their residence municipality in order to attend the current course)

- ☐ Less than 24 hours
- ☐ Between 24 hours and two days
- ☐ Three days or more

44 On average, how much do your visits spend per day? *

(Only answer those who changed their residence in order to attend their current course)

- ☐ Up to 50€
- ☐ Between 51€ and 75€
- ☐ Between 76€ and 100€
- ☐ Between 101€ and 125€
- ☐ Between 126€ and 150€
- ☐ Between 151€ and 175€
- ☐ More than 175€

FAMILY CHARACTERIZATION

45 How many persons constitute your household? *

_____persons

46 What is your parents' working situation? *

	Mother	Father
Employed		
Unemployed		
Retired		
Domestic worker (by choice, not unemployed)		
Not part of my household (death, absence, other reasons)		

47 What is your parents' socio-professional category? *

(Only answer those whose parents have got a job)

	Mother	Father
Armed Forces Members (Ex. officers, sergeants and men)		
Senior, Public Administration and Business Management		
Special Intellectual and Scientific Professions (Ex. teachers and investigators)		
Intermediate Technicians and Professionals (Ex. Electronic Technician, Construction Superintendent, Forest Technician,…)		
Administrative Staff and Similar Workers		
Service and Sales Workers		
Farmers and Skilled Agricultural and Fishery Workers		
Craft and Related Trade workers		
Instrument and Machine Operators and Assembly Workers		
Unskilled workers (Ex. non-qualified jobs, performance of simple and routine tasks)		
Domestic workers (Ex. domestic chores without any remuneration)		
Not part of my household (death, absence, other reasons)		

48 What is your parents' (complete) school level? *

	Mother	Father
1st Cycle of Basic Education		
2nd Cycle of Basic Education		
3rd Cycle of Basic Education		
Secondary Education		
Degree		
Post-Graduation		
Master's Degree		
Doctoral Degree		
Not part of my household (death, absence, other reasons)		

49 What is your household average gross income per month? *

- ☐ Up to 485€
- ☐ Between 485€ and 970€
- ☐ Between 971€ and 1.940€
- ☐ Between 1.941€ and 2.910€
- ☐ Between 2.911€ and 3.880€
- ☐ Between 3.881€ and 4.850€
- ☐ Between 4.851€ and 5.820€
- ☐ More than 5.820€

INTERNATIONAL MOBILITY

50 Have you ever attended any higher education institution abroad? *

- ☐ Yes
- ☐ No

51 Was your study period abroad part of any programme? *

(Only answer those who already attended a higher education institution abroad)

- ☐ No
- ☐ Yes, ERASMUS/TEMPUS
- ☐ Yes, another EU programme
- ☐ Other. Which?

52 Specify the name of the country where you stayed longer: *

(Only answer those who already attended a higher education institution abroad)

_____

53 Tell us how long you stayed there *

(Only answer those who already attended a higher education institution abroad)

_____ meses

54 Apart from your mobility grant, which monthly financial support did you receive (from family or other): *

(Only answer those who already attended a higher education institution abroad)

_____ Euros

55 After finishing your course, do you intend to live in the region where you study? *

- ☐ Yes, if you get a job
- ☐ Yes, because you are from this region and you do not intend to leave it
- ☐ Yes, because you have already constituted a family in this region
- ☐ Yes, because you intend to continue your training in the institution
- ☐ No, because you intend to go back to your home region
- ☐ No, because you intend to study/work abroad
- ☐ You will move wherever you find a job
- ☐ You don’t know/don’t answer

Thank you for your collaboration!