Graduate Students in Medicine Course: Motivation, Socialization and Academic Recognition

Licenciados no Curso de Medicina: Motivações, Socialização e Reconhecimento Académico

Cristina MAGALHÃES-ALVES✉[1], Joselina BARBOSA[1], Laura RIBEIRO[1,2], Maria Amélia FERREIRA[1]

ABSTRACT
Introduction: Students with a previous degree have personal and professional experiences that can contribute to a different academic path during the medical course. This study aims to: 1) analyze both satisfaction and impact of academic recognition; 2) investigate whether motivations and expectations at entrance are maintained along the course; 3) to evaluate socialization after regress to higher education.
Material and Methods: To accomplish the first objective a questionnaire was administered to 82 students who entered the medical school from 2011/2012 to 2013/2014. For the second and third goals a focus group was run (three groups with five students each, representing the three academic years).
Results and Discussion: Students felt satisfied with the recognition, and 50% of them believe that accreditations replace knowledge acquired with the curricular units, and 47% preferred to obtain accreditation. Academic achievement was negatively associated with the satisfaction of recognition and positively with age, background and registration cycle. Socialization of these students is distinct from the younger ones, their motivations at entrance are intrinsic and, contrary to expectations, are maintained along the course.
Conclusion: Students prefer recognition instead of attending the curricular units. The most satisfied with the recognition accomplish less credits and the younger ones, from health area and enrolled in the clinical cycle, accomplish more. Along the course, motivations become more solid, expectations change and socialization is carried out with greater responsibility.
Keywords: Career Choice; Education, Medical; Faculty, Medical; Motivation; Socialization

RESUMO
Introdução: Os estudantes com uma licenciatura prévia têm experiências pessoais e profissionais que contribuem para um percurso académico diferente no curso de medicina. Este estudo tem como objetivos: 1) avaliar a satisfação e o impacto do reconhecimento académico; 2) investigar se a motivações e expetativas de ingresso se mantêm ao longo do curso; 3) avaliar a socialização no regresso ao ensino superior.
Material e Métodos: Para o primeiro objetivo foi administrado um questionário a 82 estudantes que ingressaram na Faculdade de Medicina da Universidade do Porto nos anos letivos de 2011/2012 a 2013/2014. Para o segundo e terceiro objetivos foi usado um *focus group* (três grupos de cinco estudantes cada, representativos dos três anos letivos).
Resultados e Discussão: Os estudantes sentiram-se satisfeitos com o reconhecimento, sendo que 50% afirmaram que as creditações substituem o conhecimento que iriam adquirir ao realizar as unidades curriculares e 47% preferiram obter creditação. O sucesso académico associou-se negativamente com a satisfação do reconhecimento e positivamente com a idade, formação anterior e ciclo de inscrição. A socialização destes estudantes é distinta dos mais jovens, as suas motivações de ingresso são intrínsecas e mantêm-se ao longo do curso contrariamente às suas expectativas.
Conclusão: Os estudantes preferem o reconhecimento à realização de unidades curriculares. Os mais satisfeitos com o reconhecimento realizam menos créditos e os mais jovens, da área da saúde e inscritos no ciclo clínico, realizam mais. Ao longo do curso, as motivações tornam-se mais sólidas, as expectativas mudam e a socialização é realizada com maior responsabilidade.
Palavras-chave: Educação Médica; Escolha da Profissão; Faculdade de Medicina; Motivação; Socialização

INTRODUCTION

Relevant interest has been raised by graduate student admission to the Medicine course at the Faculty of Medicine of the University of Porto (FMUP) towards studying the profile of these students, due not only to the scarce information on the subject as to the use by students of the academic recognition of qualifications in an unique academic career when compared to undergraduate students.

The study primary endpoints involved (i) the analysis of the impact of the academic recognition on learning and academic success of this different group of students from undergraduate students, (ii) the analysis of the compliance with their motivations and expectations regarding the admission to the University and (iii) the identification of the contribution or influence of their experiences in academia on their medical education and socialisation.

Special call for application for admission to the course of Medicine by graduates

In the case of the Portuguese courses in medicine and according with the *Decreto-Lei* no. 40/2007,[1] compulsory vacancy notice for the special call application for admission by graduates has been ordered from school

1. Unidade de Investigação e Desenvolvimento Cardiovascular (Porto). Departamento de Ciências da Saúde Pública e Forenses e Educação Médica. Faculdade de Medicina. Universidade do Porto. Porto. Portugal.
2. I3S - Instituto de Investigação e Inovação em Saúde. Departamento de Ciências da Saúde Pública e Forenses, e Educação Médica. Faculdade de Medicina. Universidade do Porto. Porto. Portugal.
✉ Autor correspondente: Cristina Magalhães Alves. sevla@med.up.pt

year 2007/2008 onwards, at the time when the Bologna Process was implemented at the Portuguese University. Vacancies to this call are annually established by rectoral order, in accordance with the established minimum number of vacancies, corresponding to 15% of the numerus clausus for the courses of the different faculties from the school year 2011/2012 onwards.

Characteristics of the accreditation process

From an education policy perspective, the Bologna Process was informally started with the Sorbonne Declaration in May 1998 and officially started with the Bologna Declaration[2] and a range of stages and steps to be followed by the European Universities were defined in order to develop a globally harmonised European area in higher education.

One of the most relevant aspects of the Bologna Declaration regards the European Credit Transfer and Accumulation System (ECTS), carried out by the Commission of the European Communities and aimed at the creation of common procedures ensuring the academic recognition of study equivalence in the different countries.

The rules were established at the University of Porto by a specific regulation - *Despacho* no. 12722/2003 of the 4th Oct[3] stating that the process of accreditation of a previous graduation degree may follow the training granting an academic degree, particularly in study cycles leading to bachelor's, master's and PhD degree, as well as in cases deemed unequivocally relevant in the area of continuing education.

Regarding professional experience, the global assignment of the number of ECTS credits must be based on the evaluation of student's proficiency as well as on the compliance of the study cycle to the scientific areas, its topicality and proven skills.

Motivation and socialisation

Which reasons would lead these graduates back to University and choose a course in medicine, when many already have a job based on their basic training?

Two types of motivation should be mentioned: the intrinsic motivation, also called personal or unconscious motivation, based on which a certain activity is carried out, as it was considered as a valuable or appealing option; the extrinsic or conscious motivation, including external motivating factors converted into rewards that provide for the pleasure and satisfaction that the task itself cannot provide.[4]

According with Pinto (2001)[5] motivation concerns the range of internal actions that induce the organism to meet a particular demand, meaning that the initial factor can be either biological such as hunger or social as the wish to be cherished and accepted by each other.

Is graduate student's socialisation any different from undergraduate students?

Socialisation is the process by which knowledge, skills and disposition acquisition occurs making people more or less efficient in society.[6]

Socialisation is a "biographic process of incorporation of the social dispositions from not only the family and the social class of origin as also from the range of action systems that we meet through life".[7]

According with John C. Weidman (2006) socialisation in higher education could be understood as a range of processes aimed at (i) student's integration into University compliant with certain values, expectations and other personal objectives, (ii) student's exposure to different socialising influences, including normative pressures engaged through (a) social relationships with teachers and colleagues, (b) family pressures and (c) involvement in reference groups from outside the institution, (iii) student's assessment of the relevance of the different normative pressures in order to meet personal objectives, (iv) changing or keeping these values, expectations and personal objectives established at admission. Three processes are also identified in socialisation by the author: a) interpersonal interaction; b) intrapersonal interaction; c) integration. Student/teacher interaction, graduate study and class attendance and social and academic life are examples of these processes, respectively. In addition, a range of results is obtained: a) knowledge acquisition; b) skill acquisition; c) dispositions such as affectivity.[8]

This study aimed at the analysis of graduate student's motivations, expectations, experiences and the identification of any influence of the academic recognition of student's previous graduation on success and socialisation, in response to the following questions: Does the academic training have any influence on graduate student's success and academic socialisation? Will motivations and expectations at admission be met throughout the course?

MATERIAL AND METHODS

Hybrid methodology is usually used when quantitative and qualitative elements are combined into the same study.[6]

Research has been carried out based on this methodology, by reconciling quantitative and qualitative methodologies and making them complementary in order to enhance the study and a two-stage data collection has been used.

During the first stage, a questionnaire-based survey has been carried out and was delivered to all students having applied for credit recognition and having been admitted under the graduate student regulation, for on-site completion in class. Three domains were analysed with the questionnaire: a) satisfaction regarding the process for recognition of accreditation; b) factors associated with the awarded number of credits during the first application to the course; c) students preference for the academic recognition instead of attending the curriculum units of the course at the FMUP.

An 82-student sample has been involved (63 female, aged 22-41, 60% graduate students in the health area, 45% held a bachelor degree and 27% held an integrated master's degree (Table 1)).

Absolute (n) and relative frequencies (%) were used for the definition of the categorical variables. Exploratory factor analysis (EFA) with Varimax-rotated principal component method has been used to describe the information provided by the items on the satisfaction with the accreditation process.

Simple and adjusted general linear model has been used for the assessment of factors associated with the academic success. Variables with a *p*-value <0.20 in the simple model were included into the multivariate analysis. Some interactions with no significant effect were tested. The strength of the association was described through the beta coefficient and confidence interval was obtained using the bootstrap method. Data were analysed using SPSS (Statistical Package for Social Sciences) version 22.0 software. The statistical significance has been evaluated with a *p*-value ≤ 0.05.

The focus group qualitative technique has been applied during a second stage. According with Krueger and Casey (2009), focus groups aim at promoting participant's self-revelation and this is achieved when participants feel comfortable, respected and free to express their opinion.[9]

Three five-student focus groups have been carried out, corresponding to the three school years that were the target groups of the study, randomly selected from the abovementioned sample. A 'team of focus group moderators' has also been involved, in order to improve the efficacy of this process: a) one moderator mainly in charge of conducting and maintaining the discussion and

b) an assistant moderator, mainly in charge of dealing with the recording equipment, as well as in charge of looking at logistic conditions and the physical environment, responding to any unexpected interruptions and taking notes on the discussion. In this study, interviews were conducted by two moderators in no way related to students.[9,10]

Three semi-structured interviews were carried out, following a pre-established three-topic script, with a 90-minute average duration.[11] Interviews were recorded upon written consent given by each student.

According with Grbich (1999), this technique is mainly aimed at the identification of perceptions, feelings, attitudes and ideas of participants regarding a certain subject, product or activity.[12]

According with Morgan (1996, 1997), focus group is a research technique for data collection through the interaction of the group on an issue presented by the researcher, involving three crucial components: (i) the focus group technique is a research method aimed at data collection, (ii) placing the interaction within the group discussion as data source and (iii) recognizing the active role of the researcher in the dynamics of group discussion for data collection.[11,13]

Content analysis was developed through three stages: 1) codification/indexation: the assignment of categories (and subcategories, when necessary) occurred after the text has been transcript and (re)-read, reflecting the themes within the script as well as the new ones that emerged from group discussion; 2) storage/recovery: compilation of all the extracts of the text under each category in order to allow for the comparison; 3) interpretation: based on data systematic analysis, using specific analysis methods such as the inductive approach.[14]

A categorised content analysis has been carried out, based on the three themes of the script: 1) reasons for admission to the course in medicine and for having chosen the FMUP; 2) peer and teacher/student relationships and comparison of motivations and expectations regarding the admission to the course; 3) impact of accreditation in academic career, according to its sequence and the abovementioned steps.

RESULTS and DISCUSSION
Questionnaire survey

According with the results, we can reach the conclusion that students are satisfied with the registration process (48.4%), with the time period for the application (42.2%), with the evaluation and the award (37.5%), with the time of response (35.9%) and mainly with the awarded number of credits (50%).

However, the values are relatively similar in the different categories per level of satisfaction, showing an important consolidation of student's satisfaction (Table 2).

A principal component analysis has been carried out, aimed at knowing the relational structure of the items describing satisfaction with the accreditation process.

One factor explaining 48.2% of the overall variance and factorial weights ranging between 0.498 and 0.854 were

Table 1 – Characteristics of graduate students

Variables	n (%)
Gender	
Female	63 (76.8)
Male	19 (23.2)
Age	29 (4.3)
22 - 25	30 (36.6)
26 - 29	26 (31.7)
30 - 41	26 (31.7)
Qualifications	
Bachelor	37 (45.1)
Integrated masters	22 (26.8)
Masters	13 (15.9)
PhD/ Post-doc	10 (12.2)
Scientific area	
Health Sciences	60 (73.2)
Technological Sciences	8 (9.8)
Natural Sciences	13 (15.9)
Exact Sciences	1 (1.2)
Entrance year	
2011/12	27 (32.9)
2012/13	28 (34.1)
2013/14	27 (32.9)

included into the factorial solution. An internal consistency of 0.715 has been found (Table 3).

Satisfaction described in the items regarding the accreditation process has been analysed according with student's gender and age. Even though median satisfaction has been lower in male students (57.5 *vs.* 61.3), no significant differences were found (p = 0.284) between student's gender and age (Fig. 1).

As regards the factors associated with the awarded number of credits over the first year of enrolment in the course, different items were analysed, including age, gender, awarded credits, satisfaction with the accreditation process, satisfaction with awarded credits, school year, registration cycle, school level and area of previous graduation.

The univariate analysis showed that only six variables – age, gender, satisfaction with the awarded credits, school year, registration cycle, academic degree and previous graduation in the health area – showed a significant association with the awarded number of credits. Multivariate regression showed that a significant effect only remained regarding student's age, satisfaction with awarded credits, cycle registration and previous graduation in the health area. Students who were satisfied with the awarded credits through academic recognition had to achieve less credits in

Table 2 – Satisfaction with the recognition through accreditation

Items	n (%)				
	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
With the process application form	2 (3.1)	9 (14.1)	13 (20.3)	31 (48.4)	9 (14.1)
With the time period for process application	5 (7.8)	14 (21.9)	9 (14.1)	27 (42.2)	9 (14.1)
With the evaluation and accreditation	4 (6.3)	16 (25.0)	8 (12.5)	24 (37.5)	12 (18.8)
With the response time between start and completion of process	2 (3.1)	15 (23.4)	12 (18.8)	23 (35.9)	12 (18.8)
With the awarded number of credits	4 (6.3)	15 (23.4)	9 (14.1)	32 (50.0)	4 (6.3)

Table 3 – Factorial weights and item's internal consistency

| Items	Factorial weight
Satisfaction with the process application form	0.663
Satisfaction with the time period for process application	0.498
Satisfaction with the evaluation and accreditation	0.854
Satisfaction with the response time between start and completion of process	0.534
Satisfaction with the awarded number of credits	0.842
Proportion of variance explained (%)	48.2
Eigenvalue	2.4
Cronbach's alpha	0.715
Total score, median (25th-75th percentile)	60 (50 - 70)
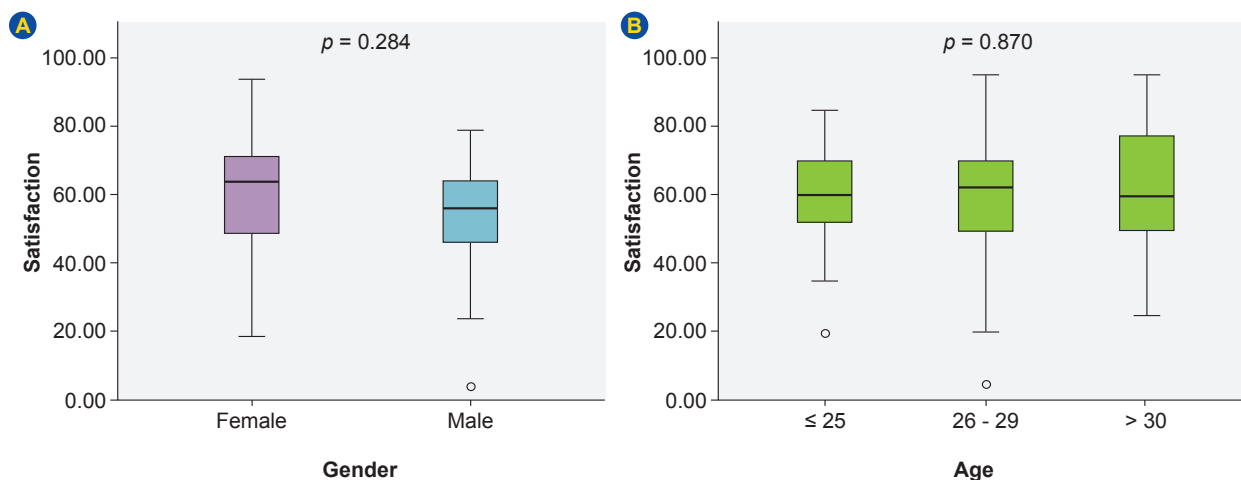
Figure 1 – Distribution of the 'satisfaction with the accreditation process' domain per gender (A) and age (B)

the future; younger students, with a previous graduation in the health area and having been registered into the clinical cycle had to achieve more credits (Table 4).

Considering the preference of the students for the accreditation *vs.* attending the curriculum units of the course at the FMUP (Table 5), we found that 50% of the students described that the awarded credits replaced the knowledge they would get had they attend the curriculum units at the FMUP and 46.9% of the students described their preference for the accreditation *vs.* attending the curriculum units at the FMUP, confirming this statement.

For these students, the level of knowledge obtained by accreditation (61.9%) is slightly higher when compared to what has been obtained by attending the curriculum units at the FMUP (54.7%). As regards the skills to become a doctor, the students described a preference for attending the curriculum units at the FMUP (61.9%) instead of obtaining the accreditation (50%), even though accreditation has been the preference. At the same time, these students have described that the level of knowledge is obtained without attending the curriculum units of the course, even though they have acknowledged that skills are acquired through attendance to the course.

Focus Group
What were the reasons for admission to the course in medicine and for having chosen the FMUP?
Medicine had primarily been the first option for graduate students and their marks at admission were the major constraint for not having been admitted to their first option upon having completed secondary education.

"(…) I have always wanted to study medicine; I was not admitted due to the marks; at that time I chose a nursing course but throughout time I realized that in fact the will never disappeared and had also increased and the opportunity for graduate students came; I thought that in fact I would try again and the opportunity came and here I am." [Student_1]

Other students added their experience in their previous graduation, describing its relevance, even though always with a preference for a course in medicine.

Table 4 – Factors associated with the awarded number of credits during the first enrolment to the course

	Gross		Adjusted	
	β (95% CI)	*p*-value	β (95% CI)	*p*-value
Age				
22 - 25	6.28 (-3.43; 16.08)	0.214	13.31 (4.53; 23.35)	**0.013**
26 - 29	12.92 (4.60; 22.06)	0.004	13.50 (5.05; 22.53)	**0.010**
30 - 41	Ref.		Ref.	
Gender				
Female	12.81 (4.13; 21.04)	0.008	8.20 (-2.51; 19.04)	0.116
Male	Ref.		Ref.	
Awarded credits	0.02 (-0.11; 0.10)	0.789		
Satisfaction with the accreditation process	-0.13 (-0.35; 0.09)	0.224		
Satisfaction with the awarded credits				
Dissatisfied	Ref.		Ref.	
Neither dissatisfied nor satisfied	-11.01 (-23.05; 1.12)	0.077	-5.14 (-15.40; 4.78)	0.324
Satisfied	-10.08 (-18.88; -0.475)	0.036	-9.73 (-18.44; -1.63)	**0.031**
School year				
11/12	1.91 (-7.50; 11.92)	0.718	2.01 (-8.67; 11.98)	0.684
12/13	9.46 (1.20; 18.23)	0.038	6.58 (-1.96; 16.04)	0.162
13/14	Ref.		Ref.	
First enrolment				
Basic year	Ref.		Ref.	
Clinical year	22.94 (19.01; 27.40)	0.001	34.92 (20.83; 52.99)	**0.001**
School degree				
Bachelor	3.76 (-4.79; 11.88)	0.410	7.30 (-0.50; 16.71)	0.090
Integrated Masters	12.74 (2.03; 22.71)	0.015	3.00 (-5.00; 11.73)	0.479
Masters, PhD and Post-doc	Ref.		Ref.	
Previous degree in the health area				
No	Ref.		Ref.	
Yes	13.65 (5.49; 22.57)	0.004	12.26 (5.10; 19.42)	**0.001**

95% CI: 95% confidence interval

Table 5 – Student preference by the accreditation recognition vs. attending the curriculum units of the course at the FMUP

Items	Completely disagree	Disagree	Neither disagree nor agree	Agree	Completely agree
			n (%)		
The awarded credits have replaced the knowledge that would have been obtained had I attend the curriculum units of the course at the FMUP	0 (0.0)	8 (12.5)	8 (12.5)	32 (50.0)	16 (25.0)
I would prefer to attend the curriculum units of the course at the FMUP vs. accreditation	10 (15.6)	30 (46.9)	18 (28.1)	6 (9.4)	0 (0.0)
The awarded credits have prepared me for the Medicine course	0 (0.0)	3 (4.7)	5 (7.8)	45 (70.3)	11 (17.2)
Having attended the curriculum units of the course at the FMUP has prepared me for the Medicine course	0 (0.0)	1 (1.6)	6 (9.4)	37 (57.8)	20 (31.3)
The awarded credits provided the same level of knowledge when compared to undergraduate students	0 (0.0)	3 (4.8)	8 (12.7)	39 (61.9)	13 (20.6)
Having attended the curriculum units of the course at the FMUP provided the same level of knowledge when compared to undergraduate students	0 (0.0)	1 (1.6)	9 (14.1)	35 (54.7)	19 (29.7)
The awarded credits were enough to acquire the necessary skills for becoming a doctor	2 (3.1)	4 (6.3)	13 (20.3)	32 (50.0)	13 (20.3)
Having attended the curriculum units of the course at the FMUP provided enough training to acquire the necessary skills for becoming a doctor	0 (0.0)	1 (1.6)	7 (11.1)	39 (61.9)	16 (25.4)

"I have always tried to be admitted to the Medicine course; I have failed twice and I had to study physiotherapy instead; I loved the course (…), I have always worked with doctors and this was what I ever wanted to do. (…) I want to be happy; I have no doubts, this was very clear to me and I have decided to try again." [Student_2]

Through the representation of some students we have found that being a doctor is no longer associated with a solid financial stability and fear and awareness of changes has been shown regarding the near future while keeping a 100% employability rate:

"I know that reality has changed a lot from when I first tried to be admitted to Medicine a few years ago, when compared to a few years from now. I have met other colleagues currently working on a fake independent working contract ('green receipts')." [Student_3]

The course of Medicine has always been the objective for these students as first option as well as upon a subsequent decision when finding some frustration with their previous degree. The FMUP is still the most frequently chosen institution, even though financial stability is no longer ensured.

Peer and teacher/student relationship and comparison between motivations and expectations regarding admission

The opinion of the students on this point has been important to know their peer and student/teacher relationships, as well as their motivations and expectations.

Peer relationships were satisfactory and have made integration easier.

"From my experience, I had a good integration; for instance, my Anatomy group includes two younger colleagues and, even though I look younger than I really am, I was asked by them how I would prefer to be called (by "tu" - least formal or by "você" – formal). [Student_4]

Graduate student's behaviour in class is different from undergraduate colleagues, as graduate students usually assume more responsibility and are more focused on learning. Academic life is also lived differently, as the need for such an active post-class integration is no longer needed.

"There is in fact a great difference from when someone talked to me in class when attending Biomedical Engineering when I was 20; I would immediately get distracted by my colleague and went on talking; now I feel bad about this as I am really interested in listening what is being said by

teachers and I am really interested in not getting distracted. This means quite a lot to me." [Student_5]

Factors 'age' and 'enrolment scheme' have been described as integrator elements, with the highest relevance and coexistence among graduate students.

"To me it was natural that I would identify with the colleagues that were admitted through the same scheme as I did; in addition, I did not want to be submitted to the *praxe* (baptism of students in Portuguese universities), to that kind of academic rituals and my posture is completely different from when I first graduated, although I feel this is quite normal." [Student_6]

As regards the teachers, respondents did not clearly described the presence of a close relationship between teachers and students; however, one student described an opinion regarding the attitude of teachers towards graduate students:

"It depends, some teachers admire our effort and others dislike it and even ask in class how many graduate students are present. They seem to feel threatened by having six graduate students in class; we are as any other student." [Student_7]

According with Millan *et al.*, the faculty is considered by students as the idealized continent, where there shall be no more anxiety, insecurity or demand; on the contrary, this will be the place where your expectations will be met and where you will finally fulfil the wish of becoming a doctor, many times present from childhood.[15]
Students describe their intrinsic motivation of wishing to become doctors in a very strong way, associated with the certainty of what they want to do in their professional future:

"I have a very strong motivation: I already know what I will do when I graduate; the professional achievement motivates me a lot. I know that I will do what I like and to me this is a great reward, as I have already worked in the area." [Student_8]

The certainty of the right choice – the course in medicine – is the main emphasis in student descriptions; they expressed their firm belief in their choice, even though the initial expectation had been deceived due to the workload required by this course.

"Motivation remains high, as I firmly believe that this is what I want. I was already expecting a pretty high workload, I am not entirely surprised. " [Student_9]

Medicine clinical cycle – from 4th curricular year onwards – was negatively described considering the initial expectations. Students expected to have a more active role with patients and namely in assisting with the approach to disease. Teacher's attitude, the high number of students and student-tutor ratio were described as constraints in fulfilling their objectives:[16]

"I expected quite a lot from the curriculum, although I

was relatively disappointed. I understand the constraints of a hospital, with patients and doctors, but in fact this is a university hospital." [Student_9]

Clinical training represents a huge constraint due to the fact that it is essentially carried out on-site and those having a professional occupation will be obliged to leave their job in order to attend classes:

"My expectation is at a low level, as I will be obliged to leave my job." [Student_10]

What is the impact of the earned credits in the academic career?

This is associated with the questionnaire's application and interviews have rectified the most subjective aspects in research.

Respondents confirmed what had been already described in the questionnaire, namely their preference for accreditation *vs.* attendance to the curriculum units of the course, thus making their academic career slightly faster.

"I have obtained different equivalences and this has allowed me to go a little further and I did not miss those subjects, as I ended up having to deal with these in master's degree." [Student_11]

CONCLUSION

At the application to the course in medicine, the participants in the study already held a previous degree that allowed for a unique and faster academic career.

Based on the application of the questionnaire and the analysis of the interviews with focal groups, we have found that academic recognition of a previous degree is a crucial element in their career and with which respondents were very satisfied. Accreditation has led the students to achieve less credits for completing the course in medicine and younger age, previous degrees in the health area and admission to the clinical cycle of the course led to greater academic success. A preference for obtaining accreditation *vs.* attending the curriculum units of the course raised doubts to the teaching-learning process due to the worries regarding success.

Socialisation of graduate students is slightly different from undergraduate students, who were for the first time admitted, as they are more focused in their objectives, showing greater responsibility and describing that there is no longer the need for an active post-class academic integration.

Intrinsic motivations were mostly described regarding admission to the course and no conscious motivations were described, as it was initially expected, remaining high throughout the academic career and probably consolidated by the experiences already obtained.

Initial expectations at the time of admission were changed and a higher workload than what was expected, the difficulty to combine an occupation with attending classes at the FMUP and an already expected more active clinical training should be mentioned. There is still the need

for further analysis taking into account a best adequacy of the pedagogical conditions in the clinical cycle.

Natural vocation and the wish to become a doctor were the mainstays for graduate students who have used this enrolment scheme – special application for graduate students.[17,18] Having not been admitted to the course of Medicine at the end of the secondary education has caused frustration and the option for an alternative choice. However, this fact has even reinforced student's natural vocation for Medicine.

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The authors declare that the followed procedures were according to regulations established by the Ethics and Clinical Research Committee and according to the Helsinki Declaration of the World Medical Association.

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The authors declare that they have followed the protocols of their work centre on the publication of patient data.

CONFLICTS OF INTEREST
The authors declare that there were no conflicts of interest in writing this manuscript.

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