

Job Satisfaction and Changes in Workplace: the Case of Academic Staff in Portuguese Higher Education

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ABSTRACT The Portuguese higher education system has been facing major reforms over the last years including the implementation of the Bologna Process, the approval of a new legal regime for the higher education institutions (HEIs) and the approval of new statutes relating to the academic career in the public higher education institutions. Thus, HEIs have to manage their resources, and human resources in particular, in order to be proactively positioned to seize opportunities and confront threats in an increasingly competitive environment. The academic staff as a key resource within HEIs plays a major role in achieving the objectives of the institution.

KEYWORDS: job satisfaction, academic career, changes, higher education.

Introduction

Job satisfaction has been widely studied until now, being defined both as a global construct and as a concept with multiple dimensions/facets (Locke, 1969, 1970; Price, 1997; Scarpello and Campbell, 1983; cited in Lund, 2003), i.e., we can talk about the overall job satisfaction as well as the satisfaction with pay, physical conditions of work, the content of work, relations with colleagues, among others.

Moreover, higher education institutions (HEIs) represent the most meaningful symbol of intellectual, economic, cultural and social life of the community in general. The performance of academic staff as teachers and researchers has an impact on student learning and implications for the quality of HEIs and their contribution to society. The centrality of the faculty role makes it a primary sculptor of institutional culture (Machado-Taylor *et al.*, 2011).

The importance of work in our lives is evident. "Work [...] occupies more time than any other single activity and it provides the economic basis for our lifestyle." (Santhapparaj and Alam, 2005, p. 72). According to Altbach and Chait

(2001, cited in Ssesanga and Garrett, 2005), the work of academics is influenced by global trends such as accountability, massification, deteriorating financial support and managerial controls. Nevertheless, we watch the rapid change of the academic workplace and the necessity to manage the tensions within the academic profession. In addition, for Altbach (2003), with the era of mass higher education the conditions of academic work have deteriorated everywhere. Academics are faced today with weaker employability opportunities and there is more competition for the same positions than in the past. A context of uncertainty, increased competition and deterioration of working conditions threatening the future of academics in higher education can be observed (Taylor *et al.*, 2007). In Portuguese higher education (PHE), the changes in the statutes of the academic careers as well as the current conditions of employment have increased the difficulty of academic and career development, while creating conditions for greater mobility between HEIs. The tenure has become more difficult and the uncertainty and job insecurity increased. Job mobility was very low in higher education but may increase in the new situation. All these "ingredients" are associated with

budget constraints and increase pressure on higher education institutions. The autonomy of institutions is greatly reduced and affects the development of the academic careers (Machado-Taylor *et al.*, 2011; Taylor *et al.*, 2007).

For the near future the academic career will strongly depend on the financial condition, framed in the logic of increasing performance assessment and accountability and immersed within European higher education area. Additionally, the financial sustainability of HEI will put greater pressure on academics, towards raising research and in service delivery revenue (Machado-Taylor *et al.*, 2013; Santiago *et al.*, forthcoming).

Theoretical Framework

Academic career is today, in a time of globalization, characterised by uncertainties, not only due to lack of resources on higher education. HEI's and academics are faced today with pressures, changes and uncertainties, due to multiple factors that are reflected in areas of academic work and in the mission of HEI's (Machado-Taylor *et al.*, 2011; Teichler, 2012). Moreover, the changes in the academic profession have been accompanied by an increasing loss of socio-economic status inflicted by a deterioration of wages and working conditions (Altbach, 2003; Taylor, 2008). Given the diversity of roles currently assigned to academics, the current changes in higher education and the influence of the contexts in which it falls, it is natural that the academic profession will go through moments of tension, ambiguity and uncertainty, marked by some haziness to their future, which, in itself, justifies a thorough reflection on academic work (Cappelleras, 2005; Enders, 2000; Teichler, 2012).

Emphasis is often placed on the changes that higher education institutions are facing today (File and Goedegebuure, 2003). Every higher education system is trying to construct a new type of system suitable to the emerging social changes (Arimoto, 2008). Moreover, it is argued that academic staff needs to take personal responsibility for their learning, and to find personal satisfaction and development by pursuing personal objectives that are compatible with the organisational and external environment (Martin, 1999). Other authors such as Kwiek (2009, p. 120) ask the question of "how to attract the best talent to academia amidst the deteriorating job satisfaction and changing work conditions of the academic profession."

Specifically, with regard to changes in the academic profession, Coaldrake and Stedman (1999) argue that there are five aspects of change in academic work, reflecting external pressures:

- academic work is becoming more specialized and demanding;
- there are growing pressures on time, workload and morale;

- staffing policies are shifting from local control and individual autonomy to a more collective and institutional focus;
- emphasis is growing on performance, professional standards and accountability;
- new tasks are blurring old distinctions between categories of staff.

According to Arimoto (2008), these academic reforms occurring today are enforced by the interactions among society (international society, national society, regional society, etc.), government (national government, local government, etc.), knowledge (advanced knowledge, academic disciplines, etc.) and university (sector, type, etc.). The author argues that mainly significant are the interactions between government and university; between university and society; and between knowledge and university (see Figure 1).

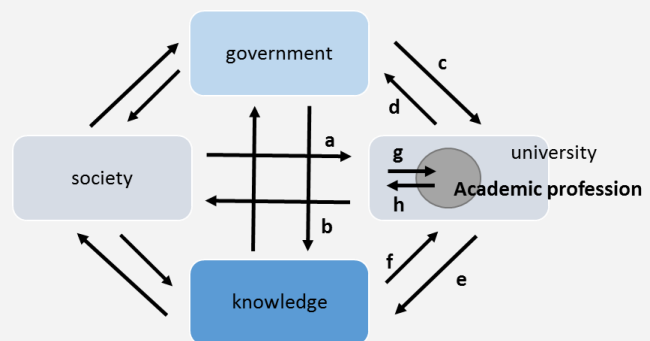


Figure 1: Environmental Change of the Academic Profession. Source: Arimoto, 2008 - International Implications of the Changing Academic Profession in Japan. In *The Changing Academic Profession in International Comparative and Quantitative Perspectives*. Report of the International Conference on the Changing Academic Profession. Research Institute for Higher Education, Hiroshima University.

Anyone even remotely familiar with the higher education world would be hardly pressed to disagree with the paramount importance of professors to the overall prosperity and functioning of the society. At the same time, there are numerous groups inside and outside the academy with vastly differing views of the academic profession and of the higher education system. Most misconceptions are the result of simply being outside the system and uninformed. That does not, however, minimize the often negative impact that the potential students', their parents', the medias' and the governments' viewpoints can produce in the system. Inside the system, there are many more personal biases and agendas along with a less pronounced but alarming lack of understanding of the roles, functions and proper contributions of the professoriate. Here, the consequences can result in poor decision-making, bad policy formulation, misguided and counterproductive channels of communication, dissatisfied professors, disgruntled students and an overall ineffective functioning HEI.

The Academic Profession in Portugal

The nature of higher education in Portugal has changed significantly over the past 40 years. The number and types of institutions have increased dramatically. Today, PHE is organized into public and non-public higher education: universities, polytechnic institutes and "other schools".

The legal framework of academic careers is quite different in public and private institutions. The government defines the size of the teaching staff and creates the rules for career advancement within public institutions. The academics of public institutions are civil servants as opposed to those that work at private institutions. Within private institutions, there are no established regulations about the academic profession. Furthermore, the size of the body of academics, career advancements and remunerations are defined by institutional decision makers. Moreover, not much is known about the academic careers in private higher education institutions because these institutions follow a private legislation, making it more difficult to analyse (Meira Soares and Trindade, 2004).

The academic university and polytechnic staff in public HEIs differ in positions, career advancements and remunerations. Mobility between the sub-systems is possible; however, it is not very common. The rigidity of policies and regulations, and the lack of a legal framework, supporting any kind of mobility inhibit such moves (Meira Soares, 2003).

Recently, in 2009, the academic careers in public higher education institutions have changed, although the main structures remain very similar. It is not the purpose of this work to go into details, but the following aspects deserve to be mentioned:

1. In the University sector, the career structure is reduced to three positions: auxiliary professor, assistant professor and full professor. All these positions can only be filled by candidates with a PhD (a full professor must also have the Portuguese title of Agregado) and all of them can only be filled after a public competition. In the case of auxiliary professor the competition must also be international. Invited academic staff has fixed term contracts and may be exempted from holding a PhD;
2. In the Polytechnic sector, the career structure has also changed and only with the exception of a special case - Professor Specialist, candidates to fill a post, also through public competition, must hold a PhD degree. A new rank was introduced - Principal Coordinator Professor (Professor Coordenador Principal) - and a candidate must hold a PhD degree and the title of Agregado;
3. In the University and Polytechnic sectors, to a certain extent, incentives can be considered to the development of scientific work, giving staff conditions to be promoted;
4. In both sectors, periodic performance evaluations have

been introduced and their results may have positive or negative impacts in their career.

These are some of the main changes in the academic career, not fully developed, that we think must be mentioned to enrich the background context of our work. (Please see Academic staff in Portuguese higher education institutions in Table A1 in Appendix).

Nevertheless, HE in Portugal has been characterized by a move to centralised managerial power, replacing the previous collegial managerial model. There has been an increasing movement to managerialism (Carvalho *et al.*, 2013; Santiago *et al.*, 2005). According to Deem, Hilliard and Reed (2008, p. 22) managerialism gnaws away the professional autonomy and control and affects the status and power of academics.

The Portuguese Academics Surveyed

A study on academic staff satisfaction was conducted in both public and private Portuguese higher education institutions - public and private, university and polytechnic. This study encompassed the continental Portugal, Madeira and The Azores institutions. A survey was conducted online to all faculty members. In this paper, we will address the academics' perceptions about the impact of changes in the conditions of employment.

A total of 4529 academics answered the survey. Most respondents worked in public higher education institutions (totalizing 79%; universities and polytechnic institutes, 42.8% and 36.2% respectively). There were 13.2% of respondent academics in private universities and 7.8% in private polytechnic institutes. With regard to age, respondents were concentrated in age groups "41-50 years" (38.2%), "31-40 years" (28%) and "51-60 years" (23.7%). Considering the distribution of respondents by sex, 50.7% of them were men and 49.3% were women.

Results

The dimensions of satisfaction are synthetic indexes constructed using a Principal Component Analysis (PCA) with a single dimension (See Saris, William, in <http://surveymethodology.eu/conferences/warsaw-2009/sessions/106/>). The dimensions of satisfaction with employment, personal and professional development and general satisfaction were measured through indicators as shown in Table 1.

All indicators present a high consistency: Satisfaction with Physical Work Environment (Cronbach's Alpha 0.786); Satisfaction with Personal and Professional Development (Cronbach's Alpha 0.908); Overall satisfaction (Cronbach's Alpha 0.885) (Please see Tables A2, A3 and A4 in Appendix).

Results for Physical Work Environment

With respect to overall satisfaction with Physical Work Environment, satisfaction is slightly higher in both types of pri-

Table 1. Dimensions of Satisfaction.

Synthetic Index	Indicators
Satisfaction with Physical Work Environment	Remuneration Career opportunities Job security
Satisfaction with Personal and Professional Development	Conditions for balance between work and family Conditions for personnel development Conditions for professional development
Overall satisfaction	Job Institution Opportunity to update knowledge Adequacy of skills to the teaching practice Social prestige of the job

vate higher education institutions - universities and polytechnic institutes (Table 2). These differences are statistically significant between public universities and public polytechnics ($p < 0.002$), public universities and private universities ($p < 0.000$), public universities and private polytechnics ($p < 0.013$).

Table 2 - Satisfaction with Physical Work Environment.

	Satisfaction with Physical Work Environment		
	N	Mean	Standard Deviation
Public University	514	5.0	1.91
Public Polytechnic	615	5.4	1.84
Private University	163	5.9	2.22
Private Polytechnic	91	5.7	2.01
Total	1383	5.4	1.95

Results for Personal and Professional Development

With respect to Personal and Professional development, the mean of satisfaction is higher in private universities and in private polytechnic institutes (5.9 and 5.6, respectively) (see Table 3). These differences are statistically significant between public universities and private universities ($p < 0.000$).

Table 3 - Satisfaction with Personal and Professional Development.

	Satisfaction with Personal and Professional Development		
	N	Mean	Standard Deviation
Public University	1345	5.2	2.46
Public Polytechnic	1150	5.2	2.45
Private University	406	5.9	2.52
Private Polytechnic	243	5.6	2.49
Total	3144	5.4	2.48

Results for Overall Satisfaction

Academics seem more satisfied in private universities and in private polytechnic institutes (6.9 and 6.8, respectively) (see Table 4).

Differences are statistically significant between public and private universities ($p < 0.000$) and between public universities and private polytechnics ($p < 0.000$).

Table 4 - General Satisfaction.

	Overall Satisfaction		
	N	Mean	Standard Deviation
Public University	1281	6.1	1.87
Public Polytechnic	1097	6.3	1.86
Private University	394	6.9	2.00
Private Polytechnic	237	6.8	1.92
Total	3009	6.3	1.90

Results for Age

As we can see (Tables 5 to 7), all academics reveal values above the centre of the scale (5), considering the dimensions "physical work environment", "professional development" and "general satisfaction". The highest mean score is for junior academics, aged until 30.

Table 5 - Satisfaction with Physical Work Environment by Age (Not significant at the 0.05 level).

		Satisfaction with Physical Work Environment		
		N	Mean	Standard Deviation
Age	Until 30 years	71	5.7	2.05
	31-40 years	414	5.5	1.92
	41-50 years	553	5.3	1.97
	51-60 years	260	5.4	1.91
	>60 years	53	5.0	2.17
	Total	1351	5.4	1.96

Table 6 - Satisfaction with Personal and Professional Development by Age.

		Satisfaction with Personal and Professional Development		
		N	Mean	Standard Deviation
Age	Until 30 years	141	6.2	2.51
	31-40 years	862	5.4	2.43
	41-50 years	1171	5.1	2.51
	51-60 years	725	5.5	2.40
	>60 years	164	6.2	2.35
	Total	3063	5.4	2.47

Table 7 - Overall Satisfaction by Age.

		Overall Satisfaction		
		N	Mean	Standard Deviation
Age	Until 30 years	131	7.3	1.71
	31-40 years	824	6.4	1.83
	41-50 years	1127	6.2	1.93
	51-60 years	689	6.2	1.87
	>60 years	160	6.5	2.15
	Total	2931	6.3	1.90

Results for Gender

Regarding the satisfaction dimensions by gender, it is interesting to note that academic female are a little more satisfied than academic male. Regarding the “physical work environment” dimension, and less satisfied concerning the “personal and professional development” dimension (see Tables 8 and 9). This set of results is not surprising, notwithstanding the tendency of the last three decades to the increase of women’s access to the academic profession. In fact, it was not always like that: before the democratic revolution (1974), HEIs were male dominated and there were very few female academics. However, in spite of the increase of women in the academic career, the vertical and horizontal segregation still exists (Machado-Taylor, 2013).

Table 8 - Satisfaction with Physical Work Environment by Gender.

	Satisfaction with Physical Work Environment		
	N	Mean	Standard Deviation
Female	679	5.4	1.90
Male	704	5.3	1.99
Total	1383	5.4	1.95

Table 9 - Satisfaction with Personal and Professional Development by Gender (Note: the mean difference is significant at the .05 level).

	Satisfaction with Personal and Professional Development		
	N	Mean	Standard Deviation
Female	1550	5.2	2.49
Male	1591	5.5	2.45
Total	3141	5.4	2.48

Results for Academic Ranking

Professors in both junior and senior positions reveal values above the mean of the scale in dimensions such as “physical work environment”, “personal and professional development” and “overall satisfaction”. However, while academics in senior ranking positions have higher levels of satisfaction, the younger academics are just slightly above the mean in the former two dimensions (see Tables 10 to 12).

Table 10 - Satisfaction with Physical Work Environment by Academic Ranking.

		Satisfaction with Physical Work Environment		
		N	Mean	Standard Deviation
Academic Position	Seniors	239	5.5	2.16
	Juniors	1202	5.3	1.90
	Total	1441	5.3	1.95

Table 11 - Satisfaction with Personal and Professional Development by Academic Ranking (Note: the mean difference is significant at the 0.05 level).

		Satisfaction with Personal and Professional Development		
		N	Mean	Standard Deviation
Academic Position	Seniors	679	5.7	2.41
	Juniors	2581	5.2	2.49
	Total	3260	5.3	2.49

Table 12 - Overall Satisfaction by Academic Ranking.

		Overall Satisfaction		
		N	Mean	Standard Deviation
Academic Position	Seniors	651	6.4	1.98
	Juniors	2469	6.3	1.88
	Total	3120	6.3	1.90

Results for Years of Teaching and Years in Current Institution

Professors with less than five years of teaching in higher education reveal higher (and positive) values of satisfaction, regarding the dimensions “satisfaction with physical Work environment”, “satisfaction with personal and professional development” and “overall satisfaction”. The same can be observed for professors with less than five years of teaching in current institution. In general, it seems like the less the number of years the more satisfied they are (Tables 13 to 15). Indeed, there are statistically significant results between

Table 13 – Satisfaction with Physical Work Environment by Years of Teaching and Years in Current Institution.

		Satisfaction with Physical Work Environment		
		N	Mean	Standard Deviation
Years are teaching in higher education	Until 5 years	202	5.8	1.96
	6 a 10 years	312	5.3	1.97
	11 a 15 years	365	5.4	1.79
	16 a 20 years	236	5.1	1.93
	> 20 years	323	5.3	2.02
	Total	1438	5.4	1.94
	Years are teaching in current institution	Until 5 years	267	5.7
6 a 10 years		350	5.3	1.93
11 a 15 years		360	5.4	1.84
16 a 20 years		212	5.1	2.01
> 20 years		267	5.2	1.95
Total		1456	5.4	1.94

Table 14 – Satisfaction with Personal and Professional Development by Years of Teaching and Years in Current Institution.

		Satisfaction with Personal and Professional Development		
		N	Mean	Standard Deviation
Years are teaching in higher education	Until 5 years	486	6.1	2.42
	6 a 10 years	605	5.3	2.39
	11 a 15 years	735	4.9	2.49
	16 a 20 years	559	5.1	2.49
	> 20 years	881	5.4	2.47
	Total	3266	5.3	2.48
Years are teaching in current institution	Until 5 years	651	6.0	2.44
	6 a 10 years	672	5.1	2.45
	11 a 15 years	732	4.9	2.48
	16 a 20 years	500	5.2	2.55
	> 20 years	744	5.4	2.42
	Total	3299	5.3	2.49

the different group ages. Those results confirm other studies on the field associated with working conditions, as well as with an increasing number of administrative tasks (Dias *et al.*, 2012; Machado-Taylor *et al.*, 2013; Teichler, 2012).

Table 15 – Overall Satisfaction by Years of Teaching and Years in Current Institution.

		Overall Satisfaction		
		N	Mean	Standard Deviation
Years are teaching in higher education	Until 5 years	468	7.1	1.77
	6 a 10 years	580	6.4	1.83
	11 a 15 years	701	6.2	1.87
	16 a 20 years	533	6.1	1.95
	> 20 years	837	6.1	1.93
	Total	3119	6.3	1.90
Years are teaching in current institution	Until 5 years	626	7.0	1.77
	6 a 10 years	647	6.3	1.84
	11 a 15 years	697	6.1	1.92
	16 a 20 years	480	6.1	2.00
	> 20 years	702	6.2	1.87
	Total	3152	6.3	1.90

Results for correspondence between the area/s of teaching and area/s of academic education and moving to another institution

As expected, the respondent academics are more satisfied when there exists a correspondence between the area/s of teaching and the area/s of academic education. As also expected, the number of academics that will move to another institution, if they have the opportunity, are less satisfied than those who will not move, in all the dimensions considered (Tables 16 to 18).

Table 16 – Satisfaction with Physical Work Environment by correspondence between the area/s of teaching and area/s of academic education and moving to another institution (Note: the mean difference is significant at the 0.05 level).

		Satisfaction with Physical Work Environment		
		N	Mean	Standard Deviation
Is there a correspondence between the area/s you teach and your area/s of academic education?	Yes	1420	5.4	1.94
	No	29	4.0	1.85
	Total	1449	5.3	1.94
If you have the opportunity, will you move to another institution?	Yes	514	4.4	1.91
	No	689	6.0	1.73
	Total	1203	5.4	1.97

Table 17 – Satisfaction with Personal and Professional Development by correspondence between the area/s of teaching and area/s of academic education and moving to another institution (Note: the mean difference is significant at the 0.05 level).

		Satisfaction with Personal and Professional Development		
		N	Mean	Standard Deviation
Is there a correspondence between the area/s you teach and your area/s of academic education?	Yes	3212	5.4	2.47
	No	67	3.7	2.78
	Total	3279	5.3	2.49
If you have the opportunity, will you move to another institution?	Yes	1076	4.1	2.43
	No	1617	6.2	2.19
	Total	2693	5.4	2.51

Table 18 – General Satisfaction by correspondence between the area/s of teaching and area/s of academic education and moving to another institution (Note: the mean difference is significant at the 0.05 level).

		Overall Satisfaction		
		N	Mean	Standard Deviation
Is there correspondence between the area/s you teach and your area/s of academic education?	Yes	3071	6.4	1.87
	No	62	4.5	2.42
	Total	3133	6.3	1.90
If you have the opportunity, will you move to another institution?	Yes	1025	5.1	1.90
	No	1552	7.1	1.53
	Total	2577	6.3	1.96

Those results do not surprise us due to the changes occurred in the last years in Portuguese higher education. Due to those changes, academics are faced with weaker employability opportunities, a context of insecurity and deterioration of working conditions, threatening their future (Machado-Taylor *et al.*, 2013). To sum up, this set of results concur with other studies developed on this subject matter (Bentley *et al.*, 2012; Machado-Taylor *et al.*, 2013; Teichler, 2012).

Concluding Remarks

Today, the academic profession faces great uncertainties in

terms of its future and has to live with professional tensions due to the changes observed in the statutes of higher education institutions and of the academic careers occurred in the last years in Portugal. However, the levels of satisfaction of academic staff are slightly above the mean value for all indicators and all institutional types. Although variations appear between institutional types, academic ranking and gender, the differences are small. The findings also concur with other studies in the subject matter. Moreover, the results presented are not surprising and confirm that working conditions have suffered changes in the recent past. Nevertheless, these results must be carefully examined and show there is place for Institutional leaders and policy makers to increase the dialogue, regarding the important issues that need to be addressed to promote and maintain satisfaction within a framework of change. Particular attention should be paid to public higher education institutions, to senior academics and female academics across all institutional types (both public and private higher education institutions).

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APPENDIX

Table A1. Academic staff in Portuguese higher education institutions (Sources: Year 2009 - PORDATA, 2011; Year 2008 - GPEARI, 2010).

Academic Staff	Year	Nº	%
By sex			
Female	2009	15756	43.5
Male	2009	20459	56.5
By institutional type			
Public University	2009	14803	40.9
Public Polytechnic	2009	10289	28.4
Private University	2009	6899	19.1
Private Polytechnic	2009	4224	11.7
By age group			
<30	2009	2274	6.3
30-39	2009	10518	29.0
40-49	2009	12296	34.0
50-59	2009	8106	22.4
60+	2009	3021	8.3
By degree of education			
PhD	2008	14205	40.1
Master	2008	9472	26.8
Licenciatura	2008	11217	31.7
Bachelor	2008	261	0.7
Other	2008	225	0.6

Table A2. Synthetic Index - Satisfaction with Physical Work Environment.

Synthetic index		Count	Minimum	Maximum	Mean	Standard Deviation	Cronbach's Alpha	Explained variance
Satisfaction with Physical Work Environment	Remuneration	4012	0	10	4.6	2.72	0.786	70.48%
	Career opportunities	3963	0	10	3.9	2.87		
	Job security	3958	0	10	4.4	3.06		

Table A3. Synthetic Index - Satisfaction with Personal and Professional Development.

Synthetic index		Count	Minimum	Maximum	Mean	Standard Deviation	Cronbach's Alpha	Explained variance
Satisfaction with Personal and Professional Development	Conditions for balance between work and family	4001	0	10	5.5	2.69	0.908	84.59%
	Conditions for personnel development	3989	0	10	5.3	2.69		
	Conditions for professional development	4008	0	10	5.2	2.75		

Table A4. Synthetic Index - General satisfaction.

Synthetic index		Count	Minimum	Maximum	Mean	Standard Deviation	Cronbach's Alpha	Explained variance
General satisfaction	Job	3993	0	10	6.6	2.04	0.885	68.81%
	Institution	3971	0	10	5.7	2.50		
	Opportunity to update knowledge	4002	0	10	5.8	2.48		
	Adequacy of skills to the teaching practice	4004	0	10	7.0	2.20		
	Social prestige of the job	3898	0	10	6.3	2.39		