

# ACADEMIC SATISFACTION AS AN AMPLIFIER OF THE ORGANIZATIONAL INTELLECTUAL CAPITAL

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## Abstract

*In this paper data will be provided from an ongoing study on academic satisfaction in Portuguese higher education. The realization of this study is providing a diverse range of information on multiple dimensions of the faculty job in higher education, in particular dimensions of satisfaction, as well as dimensions of the academic career and the professional context in which it is exercised. In the context of this paper we will discuss particularly the academic job satisfaction as an amplifier of the organizational intellectual capital within the Portuguese higher education institutions.*

*The research is being carried out at the Center for Research on Higher Education Policies (CIPES) and is being financed by Foundation for Science and Technology. The main research objectives are as follows:*

*RO1: Determine the dimensions associated with job satisfaction of the academic staff;*

*RO2: Analyze how job satisfaction differs among sub-groups of academics – sex, degree of education and institutional type.*

*The main conclusions are that academics are in general satisfied with their jobs but not very or extremely satisfied. Academics more dissatisfied were those with a higher degree of education (PhD) and those teaching in public higher education institutions, especially those in public universities. Academics are more satisfied with “Non academic staff (administrative staff, technical and laboratorial staff)”, “Teaching Climate” and “Colleagues” and express dissatisfaction with “Research Climate” and “Conditions of Employment”.*

*The results are intended as an aid in identifying areas for improvement and, consequently, this data can be used to shape policies and change, promoting the organizational intellectual capital.*

**Key words:** *academics, job satisfaction, intellectual capital, higher education.*

## Introduction

Throughout history, academic institutions have sought to respond to the demands of endlessly changing and evolving environmental conditions. In the 21<sup>st</sup> century, a number of significant factors are changing the higher education landscape. Today, higher education institutions (HEIs) are challenged to interpret the vital needs of contemporary society, to live in the market environment, to be innovative, as well as to develop the internal structures to meet their new missions. These major shifts are forcing higher education institutions (HEIs) to proactively be positioned to seize opportunities and confront threats in an increasingly competitive environment.

In Europe, the three greatest challenges are expansion, diversification and massification (Sporn, 1999). Addressing these challenges has meant finding ways to align organizational capacities with environmental demands and opportunities (Amaral & Maassen, 2002; Sadlak, 1999). At the same time, there are clear signals of the influence of the market in the higher

education sector (Jongbloed, 2004). As noted by Newman and Couturier (2002, p.1), after researching market forces in higher education worldwide for two years, "...the market has arrived in higher education. There is no turning back."

In uncertain times the academic staff is a key resource within higher education institutions and has a major role in achieving the objectives of the institution. Academic staff satisfaction is associated to motivation, job performance, students' performance and to effective academic institutions (Noordin & Jusoff, 2009). Therefore, the role of the academic staff satisfied is crucial to organizational intellectual capital. Higher education institutions are key organizations in society serving the generation, preservation and dissemination of knowledge. The academic profession is extremely important in a society often characterized as a 'knowledge society', both in being responsible for the improvement of systematic general knowledge and in providing its apex for many professional areas (Cavalli & Teichler, 2010). In this context, the academic staff can, with appropriate support, build a national and international reputation for themselves and the institution in the professional areas, in research and in publishing (Capelleras, 2005). Such a profile may have an impact on the quality of a higher education institution and, therefore, in the organizational intellectual capital. Furthermore, the performance of academic staff as teachers, researchers and managers determines much of the student success and has an impact on student learning (Machado-Taylor, Meira Soares & Gouveia, 2010; Machado-Taylor, Meira Soares, Ferreira & Gouveia, 2011).

The paper presents an ongoing study on academic satisfaction, as an amplifier of the organizational intellectual capital within the Portuguese higher education institutions. The study is being funded by the Foundation for Science and Technology, and is being held in the Center for Research of Higher Education Policies CIPES, in Portugal. The preliminary results of the survey based online and closed in early April of 2011 are presented. To contextualize the outcomes of the survey, the contextual background of the Portuguese higher education changes experienced by the sector over the last couple of decades is discussed.

## Conceptual Framework

### *Brief Overview of the Portuguese Higher Education and Academic Career*

To better understand the context of Portuguese higher education and the development of the academic career a historical perspective is adopted in this study.

Higher education in Portugal is diverse and its nature had changed significantly over the past 40 years. The number and types of institutions has increased dramatically. Today, Portuguese higher education (PHE) is organized into public and non-public higher education. Both under public and private higher education there are universities, polytechnic institutes and 'other schools'.

Meanwhile, growth in the number of academic staff in Portuguese's higher education is evident. In the 90s academic staff of the public system knew a major expansion, particularly in the newborn state polytechnic subsystem. Indeed, between 1993 and 2004, the number of professors in public university education increased by 1.3 (from 10009 in 1993 to 12549 in 2004). In the same period the group of professors in polytechnic institutes grew by 2.5 (from 3110 in 1993 to 7892 in 2004) (OCES, 2005a; OCES, 2005b).

The weight of the professional group "Academic Staff" in 2008 is very significant in relation to other professional groups, representing the majority of employees in each of the higher education subsystems. The academic staff represents over two thirds of the total staff in the entire system. (DGES - Direcção-Geral do Ensino Superior, 2008). According to statistical information provided by the *Gabinete de Planeamento, Estratégia, Avaliação e Relações Internacionais* (GPEARI, 2010) most academics in Portuguese higher education belongs to

public institutions of higher education; is male dominated although this statistic supremacy is decreasing; is aged between 30 and 50 years; and are of Portuguese nationality. On the distribution of 35 380 professors in higher education in 2008, it is noted that:

- 70% (24728) are in public higher education institutions, of which 41% (14466) belong to universities and 29% (10262) to polytechnics;
- 30% (10652) are in private higher education institutions, of which 18% (6519) belong to universities and 12% (4133) to polytechnics.

With respect to the age structure of the academic staff, it appears that faculty is aging (the percentage of professors with less than 40 years decreased from 48% in 2001 to 37% in 2008). Moreover it's interesting to note that female academic staff is less aged than male academic staff.

With respect to the higher degree of the academic staff, the number of professors with a doctoral degree increased from 9465 in 2001 to 14205 in 2008, representing an increase of 50%.

The distribution of the academics inside scientific areas shows the same similarities along the years in the period of analysis (2001- 2008). However, this hints that there are still some differences in disciplinary paths. In all years, the area with more professors is Social Sciences, Business and Law. The scientific areas with fewer professors are General Programmes and Agriculture (GPEARI, 2010).

#### *Push-pull Factors Influencing the Academic Job Satisfaction*

According to Seifert and Umbach (2008), job satisfaction is an important factor as a predictor of the intention to remain or to leave the higher education sector. Research reveals that the concept of job satisfaction is a complex collection of variables that interact in a myriad of ways. We may be led to think that pecuniary factors are determinant to job satisfaction. However, salary alone is rarely the most important mover in faculty decisions to leave, as defended by Caplow and McGee, 1958; Gartshore, Hibbard and Stockard, 1983; Johnsrud and Rosser, 2002; Matier, 1990; Smart, 1990; Toombs and Marlier, 1981 (all in Ambrose, Huston & Norman 2005).

Verhaegen (2005) analyzed the recruitment and retention of academic talent, as important factors for the success and competitiveness of a business school. The author verified that the most important factors for faculty from both a recruitment and retention perspective were academic freedom, research time, geographic location of the school and opportunities for professional development. The lower important factors for faculty were institutional factors, specifically reputation of the school, innovativeness and progressiveness of the school and international orientation (Table 1).

**Table 1. Categories and factors used in the survey.**

Categories	Factors
The school's culture and values	Academic freedom
	Stimulating peer community
	Participation in decision-making processes
	Identification with school's mission and strategy
	Availability of resources for new initiatives
	Innovativeness and progressiveness of the school
The school's reputation and position	Reputation of the school in the academic community
	Reputation of the school in the business community
	Prestige/reputation of the department/discipline
	Composition of the program portfolio
	International orientation of the school
	Partners in the school's network
Conditions of employment	Remuneration
	Career opportunities
	Job security
	Non-financial reward systems
	Resources for professional activities
	Opportunities for sideline activities or additional jobs
Personal and professional development	Balance between work and life
	Opportunities to work with people outside the school
	Opportunities and facilities for family
	Opportunities for personal growth and development
	Opportunities for professional development
	Opportunities to pursue cross-disciplinary scholarship
Teaching climate	Teaching time
	Recognition of teaching achievements
	Availability of teaching support
	Availability of teaching facilities
	Quality of students
	Participation in executive education
Research climate	Research time
	Recognition of research achievements
	Financial resources for research
	Availability of research support
	Availability of research facilities
	Research climate within the school
Work environment	Geographic location of the school
	Necessity to speak local language
	Professional opportunities for partner
	Campus quality
	Office quality
	Competency of administrative staff and support services

Source: Verhaegen, P. (2005). Academic talent: *Quo vadis?* Recruitment and retention of faculty in European business schools. *Journal of Management Development*, 24(9), 807-818.

These results “[...] could not only help the school in identifying its main bottlenecks in the recruitment and retention of academic talent, but it can also help the school to assess its competitive position and identify its unique selling points and help to design an effective profiling strategy” (Verhaegen, 2005, p.815).

A study based on academics from 14 countries (Australia, Brazil, Chile, USA, UK,

Germany, Israel, Hong Kong, The Netherlands, Korea, Japan, Russia, Sweden and Mexico) (Boyer et al. 1994, in Ssesanga & Garrett 2005) suggested that the academic satisfaction was greatly influenced by the courses taught and their relationships with their colleagues.

The “International Study on the Academic Profession” (Altbach, 1996; Enders & Teichler, 1995, 1997; all in Enders 1999) examined the academic profession in four European countries (Western Germany, the Netherlands, Sweden and England). Academics criticized negatively some areas such as the resources for their work and the teaching-related work load; junior academic staff in diverse countries considered problems of job security and lack of opportunities for career advancement.

For instance, Küskü (2001) analyzed the satisfaction level of the academic staff of a state university in Istanbul finding out that the most important factors for this satisfaction were “professional satisfaction” and “institutional job satisfaction” followed by “colleague competition level satisfaction” and “colleague relations satisfaction”.

Clery (2002) give us information about the National Survey of Postsecondary Faculty (NSOPF), a survey of college and university faculty members carried out by the U.S. Department of Education. The vast majority of faculty members were satisfied with their jobs. The participants were most satisfied with the autonomy they had to decide the content of their own courses and least satisfied with their salaries. Part-time faculty members expressed more satisfaction than their full-time counterparts, appearing to be desirable the flexibility of part-time work.

Santhapparaj and Alam (2005) in their study in Malaysia concluded that pay, promotion, working condition and support of research had positive effect on job satisfaction and, contrary to this, fringe benefits and support of teaching had negative effect on this satisfaction.

Ward and Sloane (2000) found three factors which influenced overall job satisfaction: opportunities to use their own initiative; the relationship with their colleagues and the actual work. Moreover the authors found that the least influencing factors on academic job satisfaction were promotion prospects and salary.

Stevens (2005) analyzed the job satisfaction of academics using a dataset of over two thousand academics from ten English higher education institutions and states that there are three separate set of factors which determine the job satisfaction of academics: 1) the non-pecuniary elements of the job – relations with the manager, being able to use their own initiative, the hours they work, relations with colleagues and physical work conditions -; 2) the pecuniary elements of the job - salary and total earnings -; and 3) longer term prospects - promotion prospects and job security.

Moreover, there are several studies finding that job stress influences the employees’ job satisfaction and their performance (Stamps & Piedmonte, 1986; Cooper et al., 1989; Vinokur-Kaplan, 1991; Fletcher & Payne, 1980; Landsbergis, 1988; Terry et al., 1993; Cummins, 1990; all in Ahsan, Abdullah, Fie & Alam 2009).

Many of the previous studies were conducted in countries such as US, Japan and some European countries (UK, Germany, The Netherlands and Sweden). This study intends to explore the factors that impact Portuguese academic careers. In so doing, we hope that we can identify the contributing factors to satisfaction or (dis)satisfaction and, therefore, influencing and amplifying Intellectual capital.

#### *Academic Satisfaction and the Organizational Intellectual Capital*

Nerdrum and Erikson (2001, p.127) define “intellectual capital as individuals’ complementary capacity to generate added value and thus create wealth”. OECD (1999, in Nerdrum & Erikson 2001, p.127) defines intellectual capital as “the economic value of two categories of intangible assets of a company”, that is, organizational and human capital.

Higher education colleges, institutes and universities are among the oldest institutions in the world. Throughout time, academic institutions have sought to respond to the demands of endlessly changing and evolving environmental conditions of society (Altbach, 2004; Castells, 2001). Moreover, the academy's contribution to scientific and technological advancements is premier and unparalleled in all of recorded history (Gibbons, 1998; Guruz, 2003).

Higher education institutions represent the most meaningful symbol of intellectual, economical, cultural and social life of the community in general. Besides, and according to Amiri, Jandghi, Alvani, Hosnavi and Ramezan (2010, pp.98-99), "...the competitive advantage of organizations is based on the ability to exploit knowledge resources". Moreover, the authors stressed "Today, intellectual capital (IC) is widely recognized as the critical source of true and sustainable competitive advantage. Knowledge is the basis of IC and is therefore at the heart of organizational capabilities". Thus, the intellectual capital is one of the most important aspects of the competitiveness of an higher education institution. Besides, Ulrich (1998, in Nerdrum & Erikson 2001) conceptualized intellectual capital as a multiplicative function of competence and commitment.

In this context, an important constituent group within higher education institutions is the faculty or academic staff. The academic staff is a key resource that has a major role to continuously generate and grow knowledge and therefore contributing to a competitive advantage of the institution. Academia is an institution charged with the discovery and dissemination of knowledge in our society. So, it's important to have high quality staff, in particular, academic staff, with high intellectual capital.

Job satisfaction is part of intellectual capital as pointed out by Amiri et al. (2010, p.100): "Employees' attitude is the soft part of IC, including their motivation for work and satisfaction from work."

According to Jones, Meadow and Sicilia (2009) higher education institutions establish strategic plans to achieve their goals. Nevertheless, these plans may be successful only if the needed resources are available. One of the most valuable resources of higher education institutions are the expertise of its faculty and staff; its intellectual capital. Thus, if a university efficiently measures and manages these valuable resources, it can more effectively create and organize strategies to achieve its goals.

No studies are known in the field of higher education concerning academic job satisfaction in Portugal. Therefore, it was considered relevant to identify the determinants of satisfaction or dissatisfaction of academic staff in Portuguese higher education institutions, in order to help higher education institutions leadership to promote academic job satisfaction and, as consequence, to improve organizational intellectual capital.

## **Methodology of Research**

This study is being conducted in both public and private Portuguese higher education institutions. It was administered a questionnaire survey of national dimension to all faculty members including all sub-groups (professor, researcher, part-time, full-time, etc.) of all institutional type of Portuguese higher education institutions (public-private, university-polytechnic).

Before the application of the questionnaire, the research team applied three Focus Group to know the factors of satisfaction/dissatisfaction and motivation/amotivation of the academics. The information gathered was used in the construction the questionnaire. Thus, the survey resulted from the literature review on this theme and from the preoccupations expressed by faculty members/participants in the Focus Group.

In order to have to have a vast divulgation of the survey among the faculty members several efforts were pursued. Therefore all the faculty members were invited to participate in many different ways:

1- Communications were sent to Council of Rectors of Public Universities (CRUP), Council of Presidents of Public Polytechnics (CCISP) and Portuguese Association of Private Higher Education (APESP) informing about the study and requesting their help in the dissemination of the study.

2- A letter was sent to all Rectors and Presidents both public and private universities and polytechnic institutes requesting that the link to the survey was sent to the faculty members in their institutions;

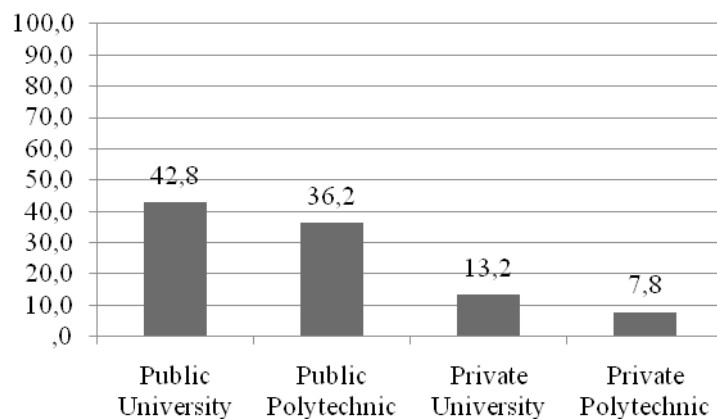
3- Also the link to the survey was sent to the three faculty unions;

4- All the steps above were repeated three times in order to increase the response rate.

The questionnaire was available to all Portuguese academics on the website <http://questionarios.ua.pt/index.php?sid=19766&lang=pt>, whose address was sent to them.

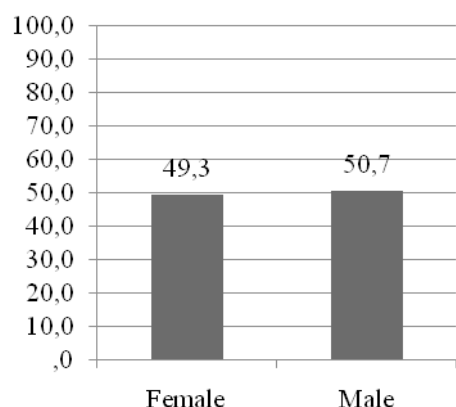
In Portuguese higher education, in 2009, there were 36215 academics (PORDATA, 2009). It was obtained a response rate of 12.5% - a total of 4529 academics participated in the study. This response rate is much higher than it is usual in a study of this dimension.

Most respondents to the survey work in public higher education institutions (79%; universities and polytechnic institutes – 42.8% and 36.2% respectively). Only 13.2% of the respondents pursue their academic profession in private universities and 7.8% in private polytechnic institutes (Figure 1).

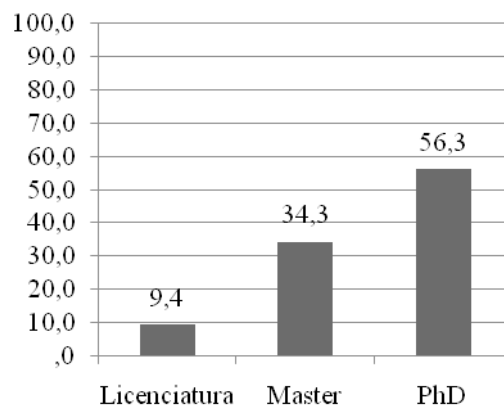


**Figure 1: Respondents by institutional type (%).**

Regarding the distribution of the respondents by sex, we can verify that 50.7% of them are men and 49.3% are women (Figure 2). With respect to the degree of education of the respondents, the majority of the respondents have a PhD (56.3%). A remarkable proportion of academics have a master (34.3%) and only 9.4% have a “Licenciatura” (Figure 3).



**Figure 2: Respondents by sex (%)**



**Figure 3: Respondents by degree of education (%)**

All quantitative data collected was placed in a database. The database and its subsequent analyses are being performed with the Statistical Package for the Social Sciences. Statistical procedures carried out for this paper included descriptive statistics, custom tables, synthetic indices created through algebraic transformation ( $\bar{x}$ ) and Principal Component Analysis (PCA) with a single component.

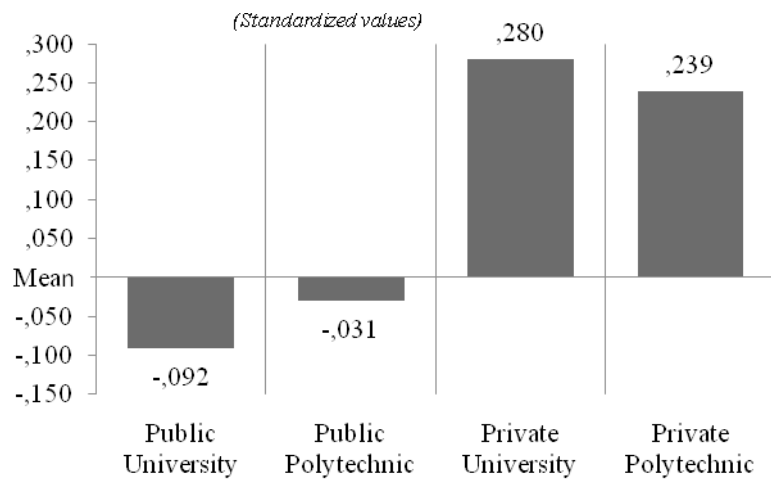
Results will be compiled in documents for dissemination and distribution. Feedback will be sent to the respondents and the higher education institutions in order they can use the results to shape policies and changes.

## Results of Research

The academics are, in general, satisfied ( $\bar{x}= 6.30$ ). The scale considered was a scale from 0 to 10, "Extremely dissatisfied" to "Extremely satisfied". It should be noted, however, that academics are not very satisfied in general.

General satisfaction is higher - above the average ( $\bar{x}= 0$ ) - in private institutions, and within them, the value is higher in private universities when compared to general satisfaction of academics in private polytechnic institutes. In public higher education, general satisfaction is lower in public universities. Public polytechnic institutes have a value around the average value (-0.031) (Figure 4).

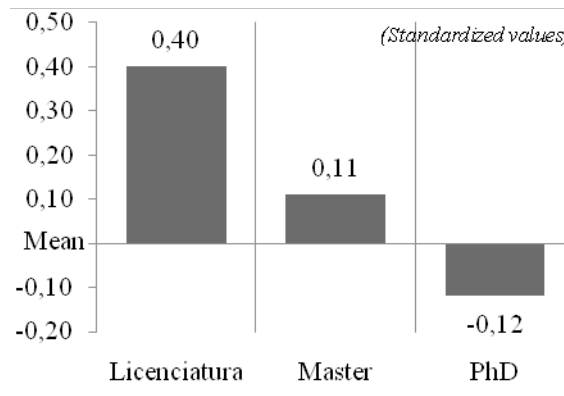




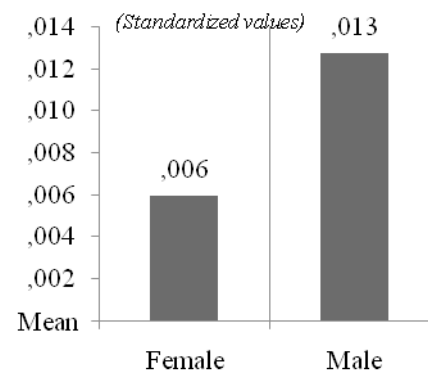
**Figure 4: General Satisfaction by institutional type.**

Regarding general satisfaction by degree of education, academics with a PhD are dissatisfied ( $\bar{x} = -0.12$ ). The most satisfied are academics with a “Licenciatura” ( $\bar{x} = 0.40$ ), followed by those with a Master ( $\bar{x} = -0.11$ ). This implies that academics with a higher degree of education are dissatisfied in general with their job (Figure 5).

Analysing *Tables/Custom Tables*, we found that general satisfaction was similar for men and women, but men showed a relatively greater satisfaction (Figure 6).



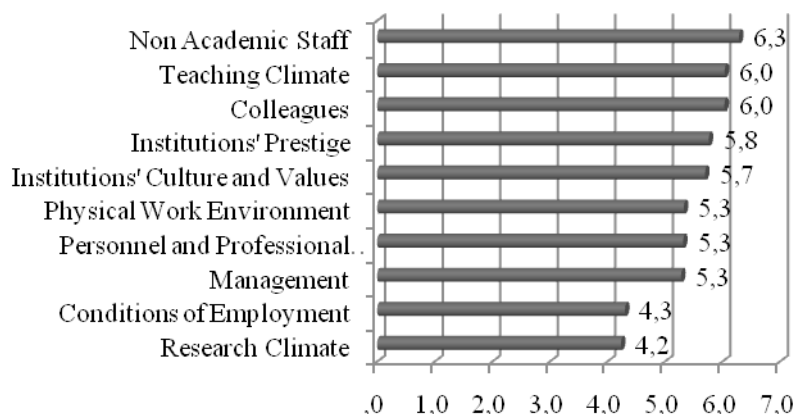
**Figure 5: General Satisfaction by degree of education.**



**Figure 6: General Satisfaction by sex.**

The dimensions of satisfaction considered in this study are: Teaching Climate; Management of the Institution/Department/Unit; Colleagues; Non academic staff (administrative staff, technical and laboratorial staff); Physical Work Environment; Conditions of Employment; Personnel and Professional Development; Institutions’ Culture and Values; Institutions’ Prestige and Research Climate.

Analyzing the synthetic indexes for each dimension of satisfaction, we verify that the higher values are in the dimensions “Non academic staff (administrative staff, technical and laboratorial staff)” ( $\bar{x} = 6.3$ ), “Teaching Climate” ( $\bar{x} = 6.0$ ) and “Colleagues” ( $\bar{x} = 6.0$ ). On the contrary, the dimensions on which academics are expressing less satisfaction are “Research Climate” ( $\bar{x} = 4.2$ ) and “Conditions of Employment” ( $\bar{x} = 4.3$ ) (Figure 7).



**Figure 7: Satisfaction Dimensions Indexes ( $\bar{x}$ ).**

## Discussion

Academics in Portuguese higher education are satisfied, but not very satisfied in general. This result is consistent with another study developed in 18 countries that highlighted disparities in the satisfaction levels among university staff – The International Changing Academic Profession (CAP) study. In fact, the results from the survey applied showed that the UK academics registered the lowest levels of satisfaction, followed by those in Portugal and Australia. The value for Portugal was 3 in a scale of 1-5 (Inside Higher Education, 2010).

General satisfaction is higher in private institutions and, within them, in private universities when compared to private polytechnic institutes. In public higher education, general satisfaction is lower in public universities. Academics with a higher degree of education (PhD) are dissatisfied in general with their job. This means that particular attention has to be made to academics working in public higher education institutions and with a higher degree of education.

General satisfaction is similar for men and women, although men show a relatively greater satisfaction. This result is similar to other results of studies in other contexts. In fact, authors such as Ward and Sloane (2000), Santhapparaj and Alam (2005) and Stevens (2005) found that female academics expressed similar levels of satisfaction, compared with male academics.

Academics are more satisfied with non academic staff, teaching climate and colleagues and dissatisfied with conditions of employment and research climate. This indicates that intrinsic aspects of the job and the relationships are important to generate satisfaction and, consequently, the involvement of the academic staff. These results are similar to Ssesanga and Garrett (2005) conclusions - academics were relatively satisfied with co-worker behavior and intrinsic factors of teaching. Ward and Sloane (2000) found that academics were most satisfied with the opportunity to use their own initiative, with the relationship with their colleagues and with the actual work; they were least satisfied with promotion prospects and salary.

Future research is needed and should focus, for example, on satisfaction of the non-academic staff and other professionals who are important constituents of higher education institutions, in order to produce information which would help in increasing the satisfaction of all employees and, consequently, their involvement and motivation to attain established objectives of these institutions.

## Conclusions

It was stated in our paper that Portuguese higher education has experienced major changes over the past decades. This ongoing study aims to provide a diverse range of information on multiple dimensions of the faculty job in higher education, in particular dimensions of satisfaction, as well as dimensions of the academic career and the professional context in which it is exercised and to help Portuguese higher education institutions (HEIs) and their leadership to identify the determinants for recruitment and retention of academic staff, to attract academic talents and to assist institutions to assess their competitive position.

The analysis of the results reveals that academics are in general satisfied with their jobs but not very or extremely satisfied. As we verify, mean ( $\bar{x}$ ) is only 6.30 in a scale from 0 to 10, “Extremely dissatisfied” to “Extremely satisfied”. This seems to reveal that there are aspects with which academics are not satisfied and it is precisely these aspects that the action of the institutional leaders should address.

Academics more dissatisfied are those with a higher degree of education (PhD) and those teaching in public higher education institutions, especially those in public universities.

Dimensions in which there should be particular attention are the dimensions with which academics are dissatisfied, already referred above. From a practical point of view, the findings from this research should heighten awareness, sensitivity and dialogue regarding the important issues that need to be addressed to promote and maintain job satisfaction within the ranks of the academic staff. Once all the data have been collected, analyzed and interpreted, it will be compiled in documents for dissemination and distribution. Feedback will be sent to the respondents and the institutions in order they can use results to shape policies and change, promoting the organizational intellectual capital.

At all moments of the study, we keep in mind that satisfaction is inextricably tied to the organizational intellectual development (Amiri et al., 2010), in order to help higher education institutions to promote excellence and productivity, because the concept of IC can be used as a strategic management framework and competitive tool for institutions.

## Acknowledgements

The article was prepared with the financial aid of the Foundation for Science and Technology.

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*Advised by Luisa Cerdeira, University of Lisbon, Lisbon, Portugal*

Received: *May 31, 2011*

Accepted: *June 18, 2011*

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