Job stress and burnout syndrome at university: A descriptive analysis of the current situation and review of the principal lines of research

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ABSTRACT
In recent decades, the university system has been affected by a number of pressures deriving from economic, political, social, cultural and technological changes, which have been taking place along the path of the so-called globalized society and as a consequence of the creation of the European Space for Higher Education. Decreasing resources, increasing demand and lack of political support have turned the university system into a favourable occupational environment for psychosocial risks such as job stress and burnout syndrome. The main lines of research on job stress and burnout syndrome in the university have been reviewed in order to answer three questions, namely whether stress and burnout can be considered a health problem in the university context, what variables are the object of study and where further research studies should lead to.

Key words: job stress, burnout, university, descriptive analysis

INTRODUCTION
Over the last two decades, important worldwide changes have taken place in the university sector, turning it into a source of stress. Among them we can highlight the drop in salaries in countries such as the United States of America, the United Kingdom and Australia, the increase of increasingly unstable temporary academic positions and the pressure and burden of work due to the need to attract external financing (Fisher, 1994).

Spain has also gone through important changes over the last few decades which have affected the university system. In order to adjust to the European Space for Higher Education, university teaching has been submitted to changes which have resulted from European convergence policies; and to the deep social, cultural and political transformations that we are witness to, and which are the subsequent products of globalization, the knowledge society and the strong presence of new technologies in our daily life (UNESCO, 1998; Michevila and Calvo, 2000). In addition to this, it is likely that this scenario of transformation is going to affect the Teaching and Research Staff (TRS) and the Administration and Service Staff (ASS) working at our universities.

In this sense, the new challenges that these changes impose on teachers go beyond the restructuring of the educational system and fully affect the very concept of the teaching profession (González, 2005).

The teacher is regarded as a critical factor in this process of change. He or she is expected to be committed, devoted and adaptable to a new professional profile based on the development of multiple responsibilities. However, all these changes that the teacher needs to become adjusted to, take place in a continuous fashion, in short time periods, and come accompanied by reductions in university budgets and an increase in the number of students. In addition to all of this, we need to consider the situation of job insecurity that a large number of Spanish university teachers find themselves in, as well as the increase in job competitiveness.

In the same way, these changes also affect the administration and service staff. For example, the change in knowledge management processes by means of information and communication technologies implies changing educational policies and some functions, not only of the teachers, but of all the professionals implied, that is, librarians, managers, clerks, etc. These changes also affect the forms of social interaction established by these professionals among one another and between teachers and students. In the same way as the teachers, these professionals need to get familiar with the new teaching plan organization, assessment systems, new degrees and their validations, etc, which implies an undoubted increase in their volume of work.

Therefore, it can be said that the situation that many Spanish universities currently live under points towards an increase of work requirements or demands and a loss of control, due to the lack of sufficient resources or having to cope with new situations, all of which creates an ideal picture for the appearance of job
stress, according to the model of Karasek (1979) or of Lazarus and Folkman (1984) and, in consequence, for the emergence of the burnout syndrome at work.

All of this accounts for the current interest in the study of stress and the burnout syndrome in university contexts. Nevertheless, in order to find out the professional effect of the dynamic of changes to the adaptation to the European Space for Higher Education on university workers, it would be necessary to carry out a study of stress and the burnout syndrome in depth based on university research studies developed in general terms. For this reason, the main goal of this work has been to review the studies on job stress and burnout in university staff, up until now, and which seeks to answer the three following questions:

- To what extent do the staff manifest job stress and the burnout syndrome.
- What the main variables in these investigations are.
- Where future lines of research might lead to.

The review has been carried out by attending to research studies on job stress and burnout at university which had been published in the main national and international databases for psychology, education and health sciences (Psycodoc, PsycInfo and Medline, among others.). The criteria for the search were: a) carried out in the last fifteen years; b) national and/or international research studies; c) focused on the study of job stress and/or burnout; d) focused on teaching and non teaching staff.

A total number of 30 studies was found (See Appendix 1), 19 of which refer to TRS (6.3%) and 11 to the AdSS (3.7%). Most of the studies provide data on job stress (19 studies versus 11 which study the burnout syndrome). Whereas studies on job stress more often use samples from the whole staff (11 studies with TRS and AdSS versus 8 studies only with AdSS samples), research studies on burnout focus almost exclusively on the teaching staff (9 studies with a TRS sample versus 2 studies with an AdSS sample). Out of the research studies selected, 9 are national and 21 are international. It is worth pointing out that national studies have mainly focused their attention on the burnout syndrome and only in the teaching group (7 national studies, versus 4 international ones).

DISCUSSION

Attending to the initial questions, the main findings are now discussed. As for the first question posed, *to what extent do the staff manifest job stress and the burnout syndrome*, the reviews point out that the teaching group is currently one of the most affected by job stress syndromes, whose consequences can be harmful both for the worker and for the centre or organization that he or she works for.

Stress and burnout in university staff can be regarded as an extensive, serious and costly problem. It can be considered extensive if we observe the prevalence of data provided by the national and international research related to this area of study. In this sense, for example, in the case of experiences of stress, authors such as Winefield and Jarrett (2001) and Winefield, Gillespie, Stough, Dua and Hapupararchchi (2003) reported that between 40 and 50% of university staff showed indicators of job stress. Dua (1994) and Sharpley, Reynolds, Acosta and Dua (1996) point out that the prevalence is around 25%. These figures surpass the 15% found in Spain by León and Avargues (2004; 2007). However, it is much higher than the one provided in the national surveys on job stress carried out in the working population. For example, according to the *VI Encuesta Nacional de Condiciones de Trabajo* (the Sixth National Survey on Working Conditions), carried out by the Instituto Nacional de Seguridad e Higiene en el Trabajo (the National Institute of Hygiene and Security at Work), 6.3% of the participating workers point to job stress as an illness causing them health problems (Almodovar and Pinilla, 2007).

In addition to this, most of the studies on stress in university personnel have shown that its prevalence is higher in the case of teachers (Dua, 1994; Sharpley et al., 1996; Winefield, 2000; Winefield and Jarrett, 2001; Winefield et al., 2003) and that, in some cases, it becomes even higher than in some other professions (Avargues, 2006; Winefield, 2000). However, the study conducted by Avargues (2006) shows that out of 32.7% of the staff with acute symptomatology, the percentage of AdSS participants was higher than that of the TRS (37.7% versus 29.5%).

As for the burnout syndrome, in the case of the teaching and research staff, the figures of prevalence in Spain range between 16.4% (Durán, Extremera and Rey, 2001), 18.4% of teachers with maximum level burnout, reported by Paredes (2000) and 22.9%, who show the most extreme level, in a study carried out by Guerrero (2003). In addition to this, as for the prevalence of burnout syndrome, León and Avargues report that 13% of the teachers and non teachers surveyed show the three dimensions of the syndrome.

Avargues (2006) studies the ‘core of burnout’ variable, which is defined from the starting point of the two negative dimensions of the syndrome, namely emotional tiredness and depersonalization, and finds that 10.7% of the staff show high scores in this variable and, as the whole staff is also considered, 8.4% of the teaching and research staff shows high scores in emotional tiredness and depersonalization, versus 14% in the administrative and service staff.

With all of this, the data provided seems to indicate that we are in face of a rather frequent problem whose consequences make it something serious and costly. To be specific, there are studies that point out that the experience of stress may affect job satisfaction, commitment to the job and the organization, the appearance of anxiety states, an increase in days off, visits to the doctor, accidents at work and illnesses (Dua, 1994; Sharpley et al., 1996). Furthermore, in relation to university teachers, Boyd and Wylie (1994) report that overload and job stress affect the time that the professional dedicates to research, publication of the findings and professional development, which has a negative impact on the teaching and research standards. Stress is also related to increase of interpersonal conflicts both at work and at home, and to physical and emotional health problems. In the same way, the study of teachers’ sick leave in Badajoz city and province from 1990 to 1995 indicates that 37% of these leaves were related to stress related health problems, among them, hypertension, insomnia, depression and gastrointestinal illnesses (Guerrero, 2003).

On the basis of all the above, and as an answer to the first of the three questions posed, we can state that job stress and the burnout syndrome are frequent problems that can affect the health of university staff.
If we go onto the second question, on the main variables under study, it has to be said that job stress in the teaching area in Spain has focused especially on primary and secondary education. On the other hand, there are only a few studies on job stress in the university context, and this seems to be an international tendency (Avargues, 2006). This may be due to the fact that university teaching has traditionally been regarded as a low stress occupation, as it started from the assumption that university staff enjoyed work stability, a low work load, freedom to propose their own research interests and flexibility of time. All in all, university teachers have usually enjoyed more freedom to decide what, when and how they want to teach, which positively affects their well-being.

Authors such as Taris, Schreur y Van Iersel – Van Silfhout (2001) do not find it appropriate to generalize the results obtained in primary and secondary education and to extend them to the university area. They argue that university teaching cannot be such an important stress factor as it is in secondary education. In this sense, Abouserie (1996) conducted a study with university teachers and found that they considered research and not teaching the main source of stress. Primary and secondary education teachers carry out only one part of the tasks to be undertaken by university teachers, the one of teaching itself.

The studies reviewed show: a) Most of the works focus on finding out the causes triggering stress and the burnout syndrome (16 studies; 5.3%) and the influence of demographic and work variables (14 studies; 4.6%). Very few centre their attention on the study of personal moderating variables. b) The reasons for job stress in higher education are multifarious. Among the most often mentioned are budget cuts, excessive weekly hours of work, lack of time to respond to the work load, lack of resources, conflictive and ambiguous role, little control over issues affecting tasks that are part of the job position, little opportunity to promote and control one’s professional career, relationships with students, little social acknowledgement and reward for their professional labour, low salaries and job insecurity. Such determining factors can be summarized into three categories, namely demands, control and social support, which interact with one another according to the assumptions of some theoretical models such as the one of demand – control or that of conservation of resources (Taris et al., 2001). c) It seems to be that job stress does not affect all workers in the same way. Some personal characteristics give rise to more or less sensitivity to the psycho-social factors responsible for occupational tension. Among the personal variables studied, the following stand out (See Appendix 1): coping strategies (4 studies; 13.3%), social support (3 studies; 10%), perceived efficiency (3 studies; 10%), optimism (1 study; 3.3%), stress resistant person- ality (1 study; 3.3%), engagement (1 study; 3.3%), Type A behaviour pattern (1 study; 3.3%) and locus of control (1 study; 3.3%).

Finally, in relation to the third question posed, namely Where future lines of research might lead to, it is worth pointing out that the professional group with the most amount of attention from researchers is the academic one. Most of them focus on the teaching function. They forget about the research issue in spite of the fact that the teachers themselves regard research studies (theses, dissertations, and so on) as the main reason for stress overload together with making lessons compatible with research, writing articles and then disseminating the findings in scientific or technical journals. The analysis of job stress in the university ambience and burnout syndrome would not be complete if it did not include the work of the administration and service staff.

As stated above, empirical evidence makes us realize that job stress and the burnout syndrome are rather frequent health problems among university teachers and the administration and service staff. As a consequence, it is not unusual that most of the research studies have focused on finding out about the degree of the problem and the organizational factors that trigger it.

Given that the situation of change that the university system is and is going to be submitted to, is unlikely to be modified and requires an effort of personal adaptation, it would be interesting to keep dealing, in depth, with personal variables which may act as moderators in the experience of stress and in the appearance of the syndrome. As a matter of fact, it might be extremely useful for elaborating prevention programmes and treatment for job stress and the burnout syndrome in the university.

In short, it would be interesting for future research studies to expand the study of stress and burnout trigger types, which should include teachers’ research and paperwork overload as well as other stress factors not yet studied which might derive from the changes taken place in the university context. In the same way, such studies should also consider the AdSS, as there are very few and, as the previous reviews show, they go through considerable stress and burnout. In addition to this, it is necessary to study personal variables in depth, as few research studies do, although they show the important role they play as modulators of the stress experience and burnout syndrome (Avargues, 2006).

Finally, it is worth pointing out that the very idiosyncrasy of each university, namely its size, the fact that it is public, private, etc. is one more limitation to this review, as this information has not been included in most of the publications. This implies an important bias to interpret the data and makes it important to be cautious when generalizing results to the whole university group.

CONCLUSIONS

The findings of our study lead to the following conclusions:

1. There is little research carried out on job stress and burnout at university.
2. Generally speaking, the studies are descriptive and focus on the analysis of the prevalence of these syndromes and their consequences.
3. The studies carried out have centered on the influence of socio-demographic and occupational variables triggering stress. Little attention has been paid to the study of personal variables that might act as syndrome moderators.
4. Future lines of research should go more in depth into these issues and also regard differences by professional groups and the study of personal variables.

REFERENCES


# APPENDIX 1. Main lines of research on stress and burnout at university

### National

<table>
<thead>
<tr>
<th>Authors, studies and year of publication</th>
<th>Staff</th>
<th>Variables studied</th>
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Socio-demographic variables |
Work tension  
Socio-demographic variables  
Perceived health  
Support received from relatives and friends  
Stressful life events  
Teaching role |
Job satisfaction  
Organizational commitment |
Socio-demographic variables  
Coping strategies |
Job stress  
Socio-demographic and work variables  
Working conditions |
Working conditions (obstacles/facilitators) |
Working conditions  
Engagement  
Working conditions (obstacles/facilitators) |
Working conditions  
Job stress  
Socio-demographic and work variables  
Working conditions  
Perceived personal competence |
Work stress  
Socio-demographic and work variables  
Working conditions  
Perceived personal competence |
Working conditions  
Stressful life events  
Type A behaviour pattern  
Optimism  
Social support, etc. |

### International

<table>
<thead>
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<th>Authors, studies and year of publication</th>
<th>Staff</th>
<th>Variables studied</th>
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</thead>
</table>
Motivational style  
Rewards at work  
Job satisfaction  
Health problems |
Alcohol and drug use |
Social support  
Coping styles  
Physical health and emotional reactions |
Stressors at work and outside  
Job satisfaction  
Physical and emotional health |
Anxiety |
at a large Australian University. *Journal of Educational Administration*, 34, 73-86.


TRS and AdSS Job stress Stress sources or triggers Socio-demographic and work variables


TRS and AdSS Job stress Stress sources Consequences Coping strategies


TRS and AdSS Job stress Stressors Socio-demographic variables

Hong-Kong


TRS Job stress Job satisfaction Stressors Socio-demographic variables Locus of control

Colombia


TRS Burnout Socio-demographic variables

Mexico


TRS Burnout Socio-demographic variables Teaching condition. Specialty Sports practice Health problems


TRS Burnout Socio-demographic variables Working conditions

The Netherlands

Hetty Van Hemmerk, I. J. (2002). Gender differences in the effects of coping assistance on the reduction of burnout in academic staff. *Work and Stress*, 16 (3), 251-263.

TRS Burnout Job satisfaction Socio-demographic variables Working conditions Coping strategies

Germany


TRS Job strain Cynicism Organizational commitment Intention to change working shift

Check Republic


TRS Job stress Hardiness Optimism Self-confidence

United Kingdom


TRS Job stress Stress sources Socio-demographic variables


TRS Job stress Burnout Stress sources Socio-demographic variables


TRS Job stress Work satisfaction Stress sources Coping strategies


TRS Job stress Job satisfaction Socio-demographic variables

New Zealand


TRS and AdSS Job stress Stress sources Socio-demographic variables


TRS and AdSS Job stress Work overload

(1) TRS = Teaching and research staff; AdSS = Administration and service staff