

## **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

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### **INTRODUCTION**

Over the last two decades, important world-wide 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

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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 Hapuarachchi (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 (Almodóvar 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 personality (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 realise 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.

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

<b>National</b>		
<b>Authors, studies and year of publication</b>	<b>Staff <sup>(1)</sup></b>	<b>Variables studied</b>
Paredes, M. C. (2000). Caracterización multivariante del síndrome de burnout en la plantilla docente de la Universidad de Salamanca. (Doctoral thesis). Universidad de Salamanca.	TRS	Burnout Socio-demographic variables
Caramés, R. (2001). Causas del "eore of burnout" del profesorado universitario. VII Congreso Español de Sociología, Salamanca.	TRS	Burnout Work tension Socio-demographic variables Perceived health Support received from relatives and friends Stressful life events Teaching role
Durán, M. A., Extremera, N. and Rey, L. (2001). Burnout en profesionales de la enseñanza. Un estudio en educación primaria, secundaria y superior. <i>Revista de Psicología del Trabajo y de la Organizaciones</i> , 17 (1), 45-62.	TRS	Burnout Job satisfaction Organizational commitment
Guerrero, E. (2003). Análisis pormenorizado de los grados de burnout y técnicas de afrontamiento del estrés docente en profesorado universitario. <i>Anales de Psicología</i> , 19 (1), 145-158.	TRS	Burnout Socio-demographic variables Coping strategies
León, J. M. and Avargues, M. L. (2004). <i>Evaluación del estrés sociolaboral en la Universidad de Sevilla</i> . Memoria de investigación. Madrid: Fundación Mapfre Medicina.	TRS and AdSS	Burnout Job stress
León, J.M. and Avargues, M. L. (2007). Evaluación del estrés sociolaboral en el personal la Universidad de Sevilla. <i>Revista Mapfre Medicina</i> , 18(4), 323-332.		Socio-demographic and work variables Working conditions
Cifre, E., Llorens, S. and Salanova, M. (2003). Riesgos psicosociales en profesores universitarios. ¿Existen diferencias atendiendo a su categoría profesional? <i>Revista de psicología social aplicada</i> , 13, 29-53.	TRS	Burnout Working conditions (obstacles/facilitators)
Salanova, M., Cifre, E., Grau, R. M. and Martínez, I. M. (2005). Antecedentes de la autoeficacia en profesores y estudiantes universitarios: un modelo causal. <i>Revista de psicología del trabajo y de las organizaciones</i> , 21 (1-2), 159-176.	TRS	Burnout Engagement Working conditions (obstacles/facilitators)
Avargues, M. L. (2006). El core of burnout y los síntomas de estrés del personal de la Universidad de Sevilla: Prevalencia, factores psicosociales y análisis del efecto mediador de la competencia personal percibida. (Doctoral Thesis). Sevilla: Servicio de publicaciones de la Universidad de Sevilla.	TRS and AdSS	Burnout Work stress Socio-demographic and work variables Working conditions Perceived personal competence
Otero, J. M., Santiago, M. J. and Castro, C. (2008). Una aproximación integradora al estudio del burnout en profesores de universidad. <i>Psicothema</i> , 20 (4), 766-772.	TRS	Burnout Working conditions Stressful life events Everyday setbacks Type A behaviour pattern Stress resistant personality Optimism Social support, etc.
<b>International</b>		
<b>Authors, studies and year of publication</b>	<b>Staff</b>	<b>Variables studied</b>
<b>USA</b>		
Blix, A. G., Cruise, R. J., Mitchell, B. M. and Blix, G. G. (1994). Occupational stress among university teachers. <i>Educational Research</i> , 36, 157-169.	TRS	Job stress Burnout Motivational style Rewards at work Job satisfaction Health problems
Etzel, E. F., Lantz, C. D. and Yura, C. A. (1995). Alcohol and drug use, and sources of stress: a survey of university faculty, staff and administrators. <i>Employee Assistance Quarterly</i> , 11 (2), 51-58.	TRS and AdSS	Sources of stress Alcohol and drug use
Hogan, M. J., Carlson, J. G. and Dua, J. (2002). Stressors and stress reactions among university personnel. <i>International Journal of Stress Management</i> , 9 (4), 289-310.	TRS and AdSS	Job and other stress Social support Coping styles Physical health and emotional reactions
<b>Australia</b>		
Dua, J. K. (1994). Job stressors and their effects on physical health, emotional health, and job satisfaction in a university. <i>Journal of Educational Administration</i> , 32, 59-78.	TRS and AdSS	Job stress Stressors at work and outside Job satisfaction Physical and emotional health
Sharpley, C. F., Reynolds, R., Acosta, A. and Dua, J. K. (1996). The presence, nature and effects of job stress on physical and psychological health	TRS and AdSS	Job stress and outside work Anxiety

at a large Australian University. <i>Journal of Educational Administration</i> , 34, 73-86.		Health
Winefield, A. H. and Jarrett, R. (2001). Occupational stress in university staff. <i>International Journal of Stress Management</i> , 8 (4), 285-298.	TRS and AdSS	Job stress Stress sources or triggers Socio-demographic and work variables
Gillespie, N. A., Walsh, M., Winefield, A. H., Dua, J. and Stough, C. (2001). Occupational stress in universities: staff perceptions of the causes, consequences and moderators of stress. <i>Work and Stress</i> , 15 (1), 53-72.	TRS and AdSS	Job stress Stress sources Consequences Coping strategies
Winefield, A. H., Gillespie, N., Stough, C., Dua, J. and Hapuararchi, J. (2003). <i>Occupational stress in Australian universities: a national survey</i> . Melbourne: National Tertiary Education Union.	TRS and AdSS	Job stress Stressors Socio-demographic variables
<b>Hong-Kong</b>		
Leung, T., Siu, O. and Spector, P. E. (2000). Faculty stressors, job satisfaction, and psychological distress among university teachers in Hong Kong: the role of locus of control. <i>International Journal of Stress Management</i> , 7, 121-138.	TRS	Job stress Job satisfaction Stressors Socio-demographic variables Locus of control
<b>Colombia</b>		
Viloria, H. and Paredes, M. (2002). Estudio del síndrome de burnout o desgaste profesional en los profesores de la Universidad de los Andes. <i>Educere Investigación</i> , 6 (17), 29-36.	TRS	Burnout Socio-demographic variables
<b>Mexico</b>		
Ponce, D. and Carlos, R. (2005). El síndrome del "quemado" por estrés laboral asistencial en grupos de docentes universitario. <i>Revista de investigación en psicología</i> , 8 (2), 87-112.	TRS	Burnout Socio-demographic variables Teaching condition. Specialty Sports practice Health problems
Pando, M., Castañeda, J. D., Gregori, M. et al (2006). Factores psicosociales y síndrome de burnout en docentes de la Universidad del Valle de Atemajac, Guadalajara, México. <i>Salud Tab</i> ; 12 (3), 523-529.	TRS	Burnout Socio-demographic variables Working conditions
<b>The Netherlands</b>		
Hetty Van Hemmerk, I. J. (2002). Gender differences in the effects of coping assistance on the reduction of burnout in academic staff. <i>Work and Stress</i> , 16 (3), 251-263.	TRS	Burnout Job satisfaction Socio-demographic variables Working conditions Coping strategies
<b>Germany</b>		
Taris, T. W., Schreurs, P. J. G., and Van Iersel-Van Silfhout, I. J. (2001). Job stress, job strain, and psychological withdrawal among Dutch university staff: towards a dual process model for the effects of occupational stress. <i>Work and Stress</i> , 15 (4), 283-296.	TRS	Job strain Cynicism Organizational commitment Intention to change working shift
<b>Check Republic</b>		
Paulik, K. (2001). Hardiness, optimism, self confidence and occupational stress among university teachers. <i>Studia Psychologica</i> , 43 (2), 91-100.	TRS	Job stress Hardiness Optimism Self-confidence
<b>United Kingdom</b>		
Bradley, J. and Eachus, P. (1995). Occupational stress within a U.K. Higher Education Institution. <i>International Journal of Stress Management</i> , 2, 145-158.	TRS	Job stress Stress sources Socio-demographic variables
Wilkinson, J. and Joseph, S. (1995). Burnout in university teaching staff. <i>The Occupational Psychologist</i> , 27, 4-7.	TRS	Job stress Burnout Stress sources Socio-demographic variables
Abouserie, R. (1996). Stress, coping strategies and job satisfaction in university academic staff. <i>Educational Psychology</i> , 16, 49-56.	TRS	Job stress Work satisfaction Stress sources Coping strategies
Oshagbemi, T. (1998). The impact of age on the job satisfaction of university teachers. <i>Research in Education</i> , 59, 95-108.	TRS	Job stress Job satisfaction Socio-demographic variables
<b>New Zealand</b>		
Boyd, S. and Wylie, C. (1994). <i>Workload and stress in New Zealand universities</i> . New Zealand: New Zealand Council for Educational Research and the Association of University Staff of New Zealand.	TRS and AdSS	Job stress Stress sources Socio-demographic variables
Chalmers, A. (1998). <i>Workload and stress in New Zealand Universities in 1998</i> . New Zealand: New Zealand Council for Educational Research and the Association of University Staff of New Zealand Wellington.	TRS and AdSS	Job stress Work overload

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